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Water Resources Data
for
New Jersey

Water Year 1977

Volume 2. Delaware River Basin and
Tributaries to Delaware Bay

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-77-2

Prepared in cooperation with the State of New Jersey
and with other agencies

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New Jersey

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of New Jersey and with other agencies by personnel of the New Jersey district of the Water Resources Division under the supervision of H. Meisler, District Chief, and J. T. Callahan, Regional Hydrologist, Northeastern Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New Jersey are in two volumes as follows:

Volume 1. Atlantic Slope Basins, Hudson River to Cape May
Volume 2. Delaware River Basin and Tributaries to Delaware Bay

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

Prepared in cooperation with

New Jersey Department of Environmental Protection
Water Resources Division
New Jersey Department of Agriculture
Delaware River Basin Commission
Corps of Engineers, U.S. Army
U.S. Environmental Protection Agency
North Jersey District Water Supply Commission
Passaic Valley Water Commission
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County of Camden

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INTRODUCTION

Water resources data for the 1977 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 26 gaging stations; tide summaries for 5 stations; stage and contents for 16 lakes and reservoirs; water quality for 17 gaging stations, 94 partial-record flow stations, and 57 wells; and water levels for 3 observation wells. Also included are data for 27 crest-stage partial-record stations and 18 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States."

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an offical Survey report on a State-boundary basis. These offical Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume of the report is identified as "U.S. Geological Survey Water-Data Report NJ-77-2." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Limited copies of this report are available locally and may be obtained from District Chief, WRD (for address see Page IV).

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection, Daniel J. O'Hern, commissioner.
Division of Water Resources, Jeff Zelikson, director.
Division of Fish, Game and Shell Fisheries, Russell A. Cookingham, director.
New Jersey Department of Agriculture, Phillip Amampi, secretary.
Division of Rural Resources, Richard D. Chumney, director.
Delaware River Basin Commission, James F. Wright, executive director.
North Jersey District Water Supply Commission, Dean C. Noll, chief engineer.
Passaic Valley Water Commission, W.E. Inhoffer, general superintendent and chief engineer.
County of Bergen, V.J. Nunno, director of Public Works and E.R. Ranuska, county engineer.
Camden County, Joseph T. Patermo, director of Camden County Planning Board.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 36 stations, and for the collection of sediment records at two stream-sampling stations and by the U.S. Environmental Protection Agency for the collection of chemical analyses at four stream-sampling stations. In addition, several stations were operated fully or partially from funds appropriated directly to the Geological Survey. Assistance was also furnished by the National Weather Service.

Basic water-quality data collected at many sampling stations on the main stem of the Delaware River and esturary--an interstate stream--included in this report were collected in cooperation with the following additional agencies:

City of Philadelphia Water Department, Carmen Guarino, commissioner.
Pennsylvania Department of Environmental Resources, Maurice K. Goddard, secretary.
Delaware Geological Survey, Robert R. Jordan, State geologist.
Delaware River Master, Francis P. Schaefer.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark and New Brunswick; American Cyanamid Co.; Elizabethtown Water Co.; Hackensack Water Co.; Johns-Manville Products Corp.; and Monmouth Consolidated Water Co.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEGMENTS

New Jersey District personnel who contributed significantly to the collection and preparation of the data in this report were: A.A. Vickers, Chief, Hydrologic Records Section, assisted by E.W. Moshinsky; J.C. Schornick, Chief, Water Quality Section, assisted by G.R. Kish.

HYDROLOGIC CONDITIONS

Streamflow during the 1977 water year continued to decrease and ranged from about average in the Delaware River Basin to about 70 percent of normal throughout the remainder of New Jersey. The severe cold weather combined with deficient precipitation in January and February caused some very low flows for that period. The below-normal rainfall continued from April through September and resulted in annual mean discharges, at many stations, which were the lowest since the end of the severe drought in 1966. There was no significant flooding in New Jersey in 1977.

The chemical quality of surface waters throughout New Jersey diminished somewhat as a consequence of below normal discharge. Due to severe cold weather conditions, increased road salting occurred. As a result, significant increases in sodium and chloride were observed in the surface waters during the winter months.

Ground-water aquifers under water table conditions generally exhibited water levels slightly below average during the year. In the more heavily stressed artesian aquifers, a continued downward trend was noted. New low levels were reached at many sites during the heavily pumped period between July and September.

Monthly and annual discharge is compared with medians at three representativo gaging stations in figures 3 and 4. The streamflow stations chosen for illustration were South Branch Raritan River near High Bridge and Great Egg Harbor River at Folsom, which reflect runoff conditions in the northern and southern parts of the State, respectively, and Delaware River at Trenton in which there is widespread interest.

Streamflow at South Branch Raritan River near High Bridge for the year averaged 118 ft^3/s (3.34 m^3/s), 99 percent of normal. The average flow for Great Egg Harbor River at Folsom was 57.2 ft^3/s (1.62 m^3/s), 66 percent of normal. The observed annual mean discharge on the Delaware River at Trenton was 12,160 ft^3/s (344.4 m^3/s), 104 percent of normal. The natural flow at Trenton (adjusted for diversion and storage upstream) was 113 percent of normal for the year.

Storage in the 13 major water-supply reservoirs in New Jersey decreased from 61.1 billion gallons (80 percent of usable capacity) on October 1 to 45.4 billion gallons (59 percent of usable capacity) on September 30. Storage in Wanaque Reservoir decreased from 23.1 billion gallons (83 percent of usable capacity) on October 1 to 16.4 billion gallons (59 percent of usable capacity) on September 30. Pumped storage in Round Valley Reservoir on September 30 was 51.6 billion gallons (94 percent of capacity), a decrease of 0.5 billion gallons during the year.

DEFINITION OF TERMS

Terms related to streamflow, water-quality and other hydrologic data, as used in this report, and defined below. See also the table for converting English units to International System of Units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life process. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per litre of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present present at stationary phase and is expressed as milligrams dry weight of algae produced per litre of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, trapped by the well. A flowing artesian well is one in which the water level is above land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

> *Total coliform bacteria* are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonsporeforming, rodshaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.
>
> *Fecal coliform bacteria* are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.
>
> *Fecal streptococcal bacteria* are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococus medium (nutrient medium for bacteria growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per litre, used for the decomposition of organic matter by microrganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3) and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken once or more times daily.
3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, and artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (cfs) is the rate of discharge representing a volume 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (Mean) is the arithmetic mean of individual daily mean discharge during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index is a numerical expression of evenness of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Low tide is the minimum height reached by each falling tide.

Mean high or low tide is the average of all high or low tides, respectively, over a specified period.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synethetic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per litre (UG/L, µg/l) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre presents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, p. 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 5.

National Geodetic Vertical Datum of 1929 (NGVD), formerly called "Sea Level Datum of 1929". A geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. In the adjustment, sea levels from selected Tide stations in both countries were held as fixed. NGVD has been substituted for the previously used term "mean sea level" in the Gage paragraph.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organism collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow data are collected systematially over a period of years for use in hydrologic analyses.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1} ...	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2})......	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*..	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})...	.03333	Nickel (Ni^{+2})*...	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})...	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})...	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3}).	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})..	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1})....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})...	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined either by seive or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in active water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispesion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 differenct basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (CP, pCi) is one trillionth (1×10^{-12}) of the amount radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substance. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per millilitre of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per millilitre of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg $C/(m^2.time)$ for periphyton and macrophytes and mg $C/(m^3.time)$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity that the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg $O_2/(m^2.time)$ for periphyton and macrophytes and mg $O_2/(m^3.time)$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises from a difference in the number of neutrons in the necleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this report are natural uranium in µg/l (micrograms per litre), radium as radium-226 in PC/L, (pCi/l, picocuries per litre), gross beta in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (µg/l). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is tranformed by, suspended in, or deposited from water, it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Supended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimetre at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physcial surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered.

All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45 micrometer filter.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperatures of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance is solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organism have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	*Hexageria*
Species	*Hexagenia limbata*

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports. From Water Year 1976, it has been changed to WDR, an abbreviation for "Water-Data Report".

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01463500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "463500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Miscellaneous downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The wells and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, assign sequential number "01", "02", etc. as one would for wells. See figure 1 below.

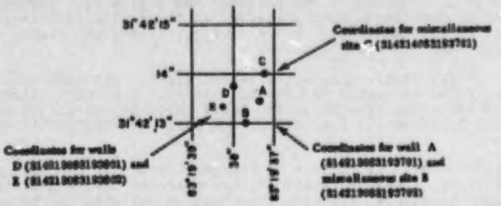
31°42'15"
14"
31°42'13"
83°19'38"
37"
83°19'36"
Coordinates for miscellaneous site C (314214083193701)
C
D
A
E
B
Coordinates for wells D (314213083193601) and E (314213083193602)
Coordinates for well A (314213083193701) and miscellaneous site B (314213083193702)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are decribed in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resouces Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the bais of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage height are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location for the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present stations or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage relative to NGVD, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE". In references to datum of gage, the phrase National Geodetic Vertical Datum (NGVD), see definition of terms, refers to "Sea Level Datum of 1929" which was previously called "mean sea level".

Information pertaining to the accuracy of the dicharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first the extremes for current year, second, the extremes for the period of record, and last, information availalbe outside the period of record. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest-stage obtained by use of a water-stage recorder (graphic or digital), a crest- stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN), or in acre-feet (line headed "AC-FT). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are with 5 percent; "good" within 10 percent; and "fair" with 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water records for the 5-year period October 1, 1965 to September 30, 1970, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Paper 1302; records for October 1950 to September 1960 have been compiled and published in Water-Supply Paper 1722; records for October 1960 to September 1965 have been compiled and published in Water-Supply Paper 1902; records for October 1965 to September 1970 have been compiled and published in Water-Supply Paper 2102. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of stage or discharge collected by agencies other than the Geological Survey

Records of stage or discharge not published by the Geological Survey were collected in New Jersey at 40 sites during the water years October 1960 to current year by the following agencies: records at 7 sites were collected by New Jersey State Department of Environmental Protection; at 4 sites by the North Jersey District Water Supply Commission; at 14 sites by Passaic County; at 5 sites by the National Weather Service; at 2 sites by the National Ocean Survey; at 3 sites by the Corps of Engineers, and 5 sites by Delaware River Joint Toll Bridge Commission. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintain an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water sampling stations, no descriptive statements are given. However, the well number, depth of well, date of sampling, and/or other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of characteristics of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnishes information from which daily minimums and maximums are obtained, or else where a water-quality noncontinuous-digital monitor furnishes hourly temperature readings that provide daily maximum, minimum, and mean temperature data summaries. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using the table below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definitions of Terms," p. 4 and table for converting English Units to SI Units, inside back cover).

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)* (Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.4	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	33.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar, Lamar, Goerlitz, and Law, and Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Slack and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the possible case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory. Field determination of carbonate and bicarbonate was initiated September 1976.

The daily chemical quality data in this report generally represent equal-volume composites for 2-to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

For Chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office (for address see Page IV).

Ground-water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are analyzed individually.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. Influential factors, field measurement, and data representation of temperature are described by Stevens, Ficke and Smoot.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum continuous-digital water quality monitor which provide hourly readings, the records consist of daily maximum, minimum, and mean temperature data summaries.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

REMARK CODES FOR WATER-QUALITY DATA

PRINTED OUTPUT	REMARK	PRINTED OUTPUT	REMARK
E	ESTIMATED VALUE	<	ACTUAL VALUE IS KNOWN TO BE LESS THAN THE VALUE SHOWN
>	ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE SHOWN	ND	MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED
B	RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT)		

PUBLICATIONS

Table 4 below, shows the annual series of water-supply papers that give information on quality of surface waters in New Jersey, Section 1. North Atlantic slope basins.

Table 4.--Water-supply paper (WSP) numbers and parts, water years, 1945-70

Year	WSP	Parts	Year	WSP	Parts	Year	WSP	Parts
1945	1030	1-14	1954	1350	1-4	1963	1947	1-2
1946	1050		1955	1400		1964	1954	
1947	1102		1956	1450		1965	1961	
1948	1132	1-4	1957	1520		1966	1991	
1949	1162		1958	1571	1-2	1967	2011	
1950	1186		1959	1641		1968	2091	1
1951	1197		1960	1741		1969	2141	
1952	1250		1961	1881		1970	2151	
1953	1290		1962	1941				

Water-quality criteria

The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) stipulated that water-quality criteria was to be developed to assure the integrity of ground and surface waters of the United States. Criteria were set for various types of water use.

These criteria indicate limiting values of various parameters in water to provide adequate protection of water users, essential aquatic life, and consumers of such aquatic life.

Chemical constituents in bottom sediments (BTM) are reported as weight of constituent per weight of sediment. These limiting values are based not on health effects, but rather on the potential hazard which might be caused if these sediments were suspended into the water phase.

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
		General Inorganics		
Alkalinity, total (as CACO)	20*	mg/L	2	A
Antimony	50	ug/L	5	C
Antimony, BTM	500	ug/g	5	C
Arsenic	50	ug/L	4,6	A,B,C
	100	ug/L	3	A
Arsenic, BTM	200	ug/g	5	C
Barium	1000	ug/L	4,6	A,B,C
Barium, BTM	2000	ug/g	5	C
Beryllium	11	ug/L	2a	A,C
	100	ug/L	3	A
	1100	ug/L	2b	A
Beryllium, BTM	200	ug/g	5	C
Boron	750	ug/L	3	A
	1000	ug/L	5	C
Cadmium	0.4	ug/L	1a	A
	1.2	ug/L	1b	A
	4.0	ug/L	2a	A
	5.0	ug/L	8	A
	10	ug/L	4,6	A,B,C
	12	ug/L	2b	A
Cadmium, BTM	20	ug/g	5	C
Chloride	250	mg/L	6a	D
Chromium, total	50	ug/L	4,6	A,B,C
	100	ug/L	2	A
Chromium, BTM	200	ug/g	5	C
Color	15	color units	6a	D
	75	color units	4	A
Copper	1000	ug/L	4,6a	A,C,D
Copper, BTM	2000	ug/g	5	C
Cyanide	5	ug/L	2,8	A
	20	ug/L	5	C
Cyanide, BTM	100	ug/g	5	C
Fecal coliform, MF	200†	col/100 mL	7	A
Fecal coliform, MPN	200†	col/100 mL	7	A
Iron	300	ug/L	4,6a	A,D
	1000	ug/L	2	A
Lead, dissolved	50	ug/L	4,6	A,B,C
Lead, total	200	ug/L	5	C
Lead, BTM	500	ug/g	5	C
Manganese	50	ug/L	4,6a	A,D
Mercury	0.05	ug/L	2	A
	0.1	ug/L	8	A
	2	ug/L	4,6	A,B,C
Mercury, BTM	20	ug/g	5	C
Nickel	100	ug/L	2,8	A,C
Nickel, BTM	2000	ug/g	5	C
Nitrate (as N)	10	mg/L	4,6	A,B,C
Nitrite (as N)	1	mg/L	4	A,C
Oxygen, dissolved	5*	mg/L	2	A
pH	6.5-8.5		6a,8	A,C,D
	6.5-9.0		2	A
	5.0-9.0		4	A
Selenium	10	ug/L	4,6	A,B,C
Selenium, BTM	20	ug/g	5	C
Silver	50	ug/L	4,6	A,B,C
Silver, BTM	1000	ug/g	5	C
Solids, total dissolved	500	mg/L	6a	D
Sulfate	250	mg/L	6a	D
Zinc	5000	ug/L	4,6a	A,C,D
Zinc, BTM	5000	ug/g	5	C
		Organics		
Aldrin-dieldrin	0.003	mg/L	2	A
Aldrin	0.01	mg/L	9	C
Aldrin, BTM	20	ug/kg	5	C
Chlordane	0.004	ug/L	8	A
	0.01	ug/L	2	A,C
Chlordane, BTM	20	ug/kg	5	C
DDT**	0.001	ug/L	2,8	A
	0.01	ug/L	9	C
DDT, BTM	20	ug/kg	5	C
Demeton	0.1	ug/L	2,8	A
Dieldrin	0.01	ug/L	9	C
Dieldrin, BTM	20	ug/kg	5	C

WATER QUALITY CRITERIA--Continued

Parameter name	Limiting value	Units	Use	Basis for selection
Endosulfan	0.001	ug/L	8	A
	0.003	ug/L	2	A
	0.01	ug/L	9	C
Endrin	0.004	ug/L	2,8	A
	0.01	ug/L	9	C
	0.2	ug/L	4,6	B
Endrin, BTM	20	ug/kg	5	C
Guthion	0.01	ug/L	2,8	A
Heptachlor	0.001	ug/L	2,8	A
	0.01	ug/L	9	C
Heptachlor, BTM	20	ug/kg	5	C
Heptachlor epoxide	0.01	ug/L	9	C
Heptachlor, epoxide, BTM	20	ug/kg	5	C
Lindane	0.004	ug/L	8	A
	0.01	ug/L	2	A,C
	4	ug/L	4,6	A,B
Lindane, BTM	20	ug/kg	5	C
Malathion	0.1	ug/L	2,8	A,C
Malathion, BTM	20	ug/kg	5	C
MBAS (foaming agents)	0.5	mg/L	6a	D
Methoxychlor	0.03	ug/L	2,8	A,C
	100	ug/L	4,6	A,B
Methoxychlor, BTM	20	ug/kg	5	C
Mirex	0.001	ug/L	2,8	A
	.01	ug/L	9	C
Mirex, BTM	20	ug/kg	5	C
Parathion	0.04	ug/L	2,8	A,C
Parathion, BTM	20	ug/kg	5	C
PCB	0.001	ug/L	2,8	A
	0.1	ug/L	9	C
PCB, BTM	20	ug/kg	5	C
Phenols	1.0	ug/L	4	A
	5.0	ug/L	5	C
Toxaphene	0.005	ug/L	2,8	A
	1.0	ug/L	9	C
	5.0	ug/L	4,6	A,B
Toxaphene, BTM	20	ug/kg	5	C
Silvex	10	ug/L	4,6	A,B,C
Silvex, BTM	20	ug/kg		C
2, 4-D	100	ug/L	4,6	A,B,C
2, 4-D, BTM	20	ug/kg	5	C
Radiochemicals				
Radium 226	5	pCi/L	4,6	B,C
Strontium 90	8	pCi/L	4,6	B,C
Tritium	20,000	pCi/L	4,6	B,C
Gross alpha	15	pCi/L	4,6	B,C

* Minimum recommended value

† Log mean, based on not less than five samples

** Including metabolites (DDD and DDE)

Water Use and/or for the Protection of:

1a. Sensitive salmonoid species in soft water
1b. Sensitive salmonoid species in hard water
2. Freshwater aquatic life
2a. Freshwater aquatic life in soft water
2b. Freshwater aquatic life in hard water
3. Crop irrigation
4. Domestic water supply source
5. Recommended limits have not been established; limit set to arbitrarily flag no more than the upper 15 to 20 percent of values nationwide.
6. Potable drinking water, based on health effects
6a. Potable drinking water, based on aesthetic considerations
7. Primary contact
8. Marine aquatic life
9. Minimum non-zero concentration reported by the U.S. Geological Survey Central Water Quality Laboratories system.

Basis for Selection

A. Maximum levels recommended by: Quality Criteria for Water, 1976, U.S. Environmental Protection Agency.
B. Maximum contaminant level established by: National Interim Primary Drinking Water Regulations 1976, U.S. Environmental Protection Agency.
C. Suggested limiting value, U.S. Geological Survey, Quality of Water Branch.
D. Maximum contaminant level recommended for the Proposed Secondary Drinking Water Regulations, U.S. Environmental Protection Agency.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs (see figure 1).

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurment nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level, now designated as NGVD, is the datum plane on which the national network of precise levels is based; land-surface datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above NGVD is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

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PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office. Prices are effective January 1978 but are subject to change.

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1-D1. *Water temperature-influential factors, field measurement, and data presentation,* by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages. $1.60.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W.W.Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages. $0.85

2-D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. $1.90.

2-E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. $1.75.

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3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. $0.35.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. $0.40.

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3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages. $0.35.

3-A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968, 13 pages. $1.00.

3-A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages. $1.40.

3-A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. $1.25.

3-A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. $1.20.

3-A12. *Fluorometric procedures for dye tracing,* by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. $0.70.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2 1976. 172 pages. $2.50.

3-C1. *Fluvial sediment concepts,* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. $0.65.

3-C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2, 1970. 59 pages. $2.50.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages. $2.10.

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5-A2. *Determination of minor elments in water by emission spectroscopy,* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. $0.80.

5-A3. *Methods for analysis of organic substances in water,* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. $0.90.

5-A4.* *Methods for collection and analysis of aquatic biological and microbiological samples,* edited by P.E. Greeson, T.A. Ehlke, G.A. Irwin. B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages. $20.00.

5-A5.* *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages. $16.00.

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7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. $2.30.

8-A1. *Methods of measuring water levels in deep wells,* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. $0.70.

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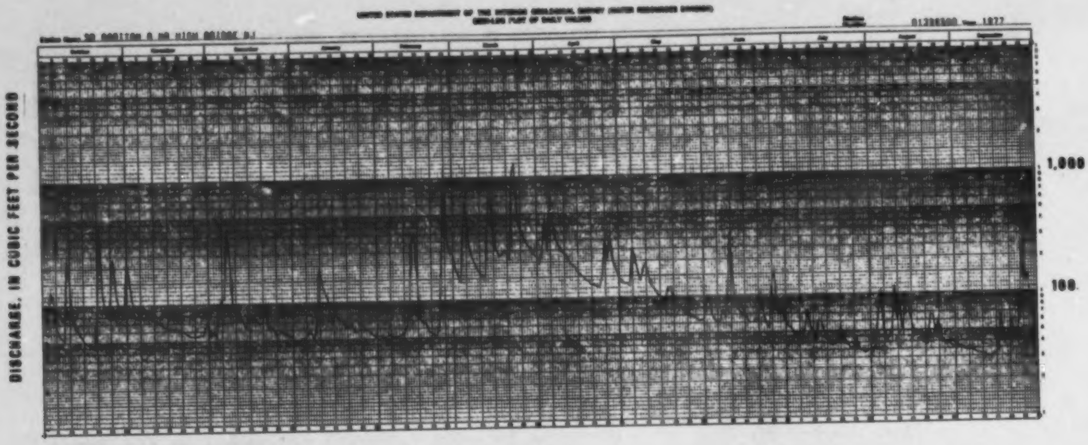
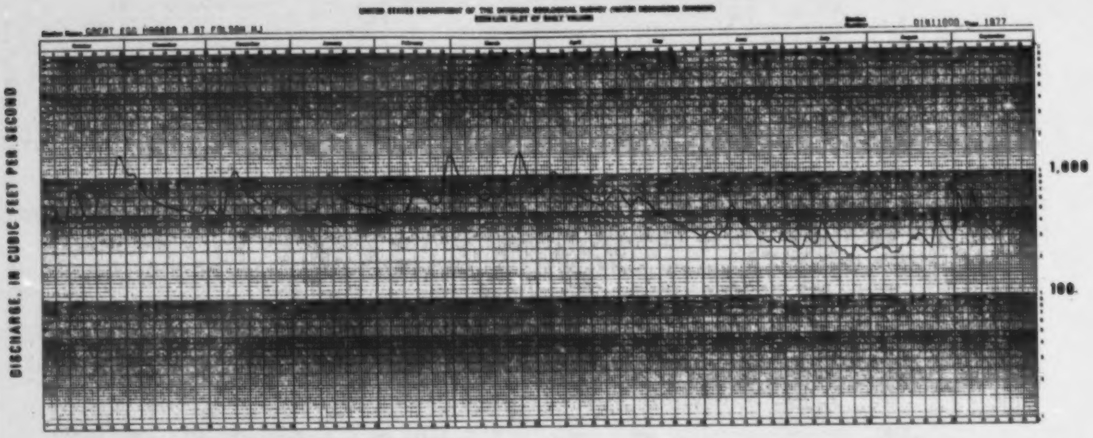




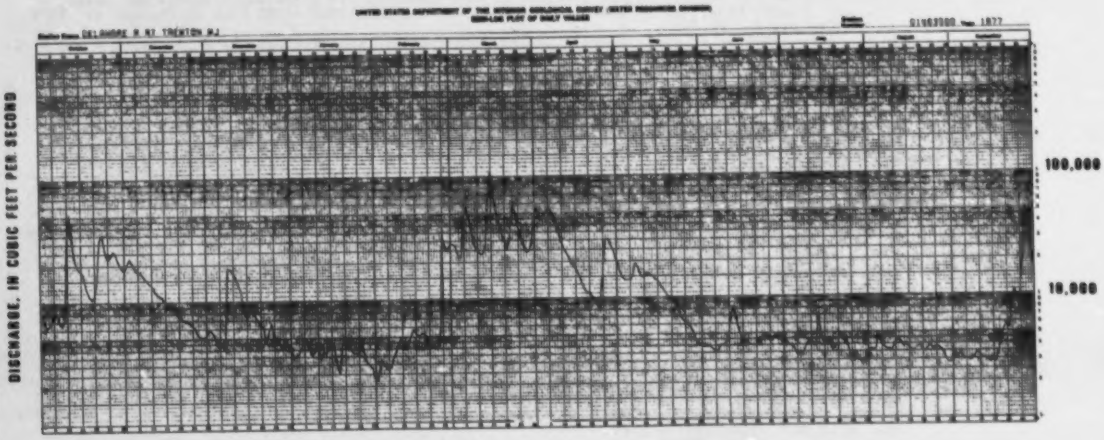
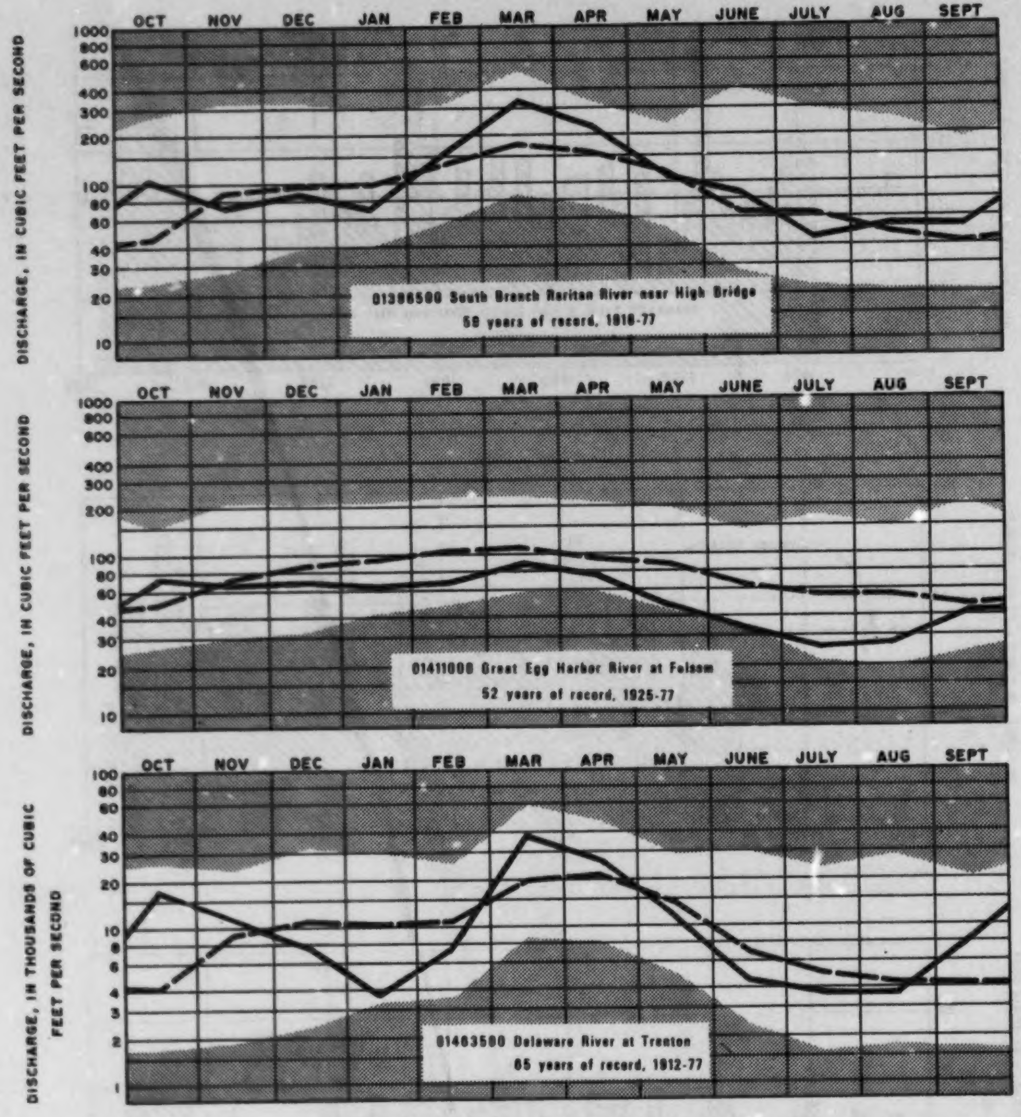


FIGURE 2.--DAILY STREAMFLOW AT KEY GAGING STATIONS



Unshaded area.--Indicates range between highest and lowest mean recorded for the month prior to 1977 water year.

Dashed line.--Indicates normal (median of the monthly means) for the standard reference period 1941-70.

Solid line.--Indicates observed monthly mean flow for the 1977 water year.

FIGURE 3.--MONTHLY STREAMFLOW AT KEY GAGING STATIONS

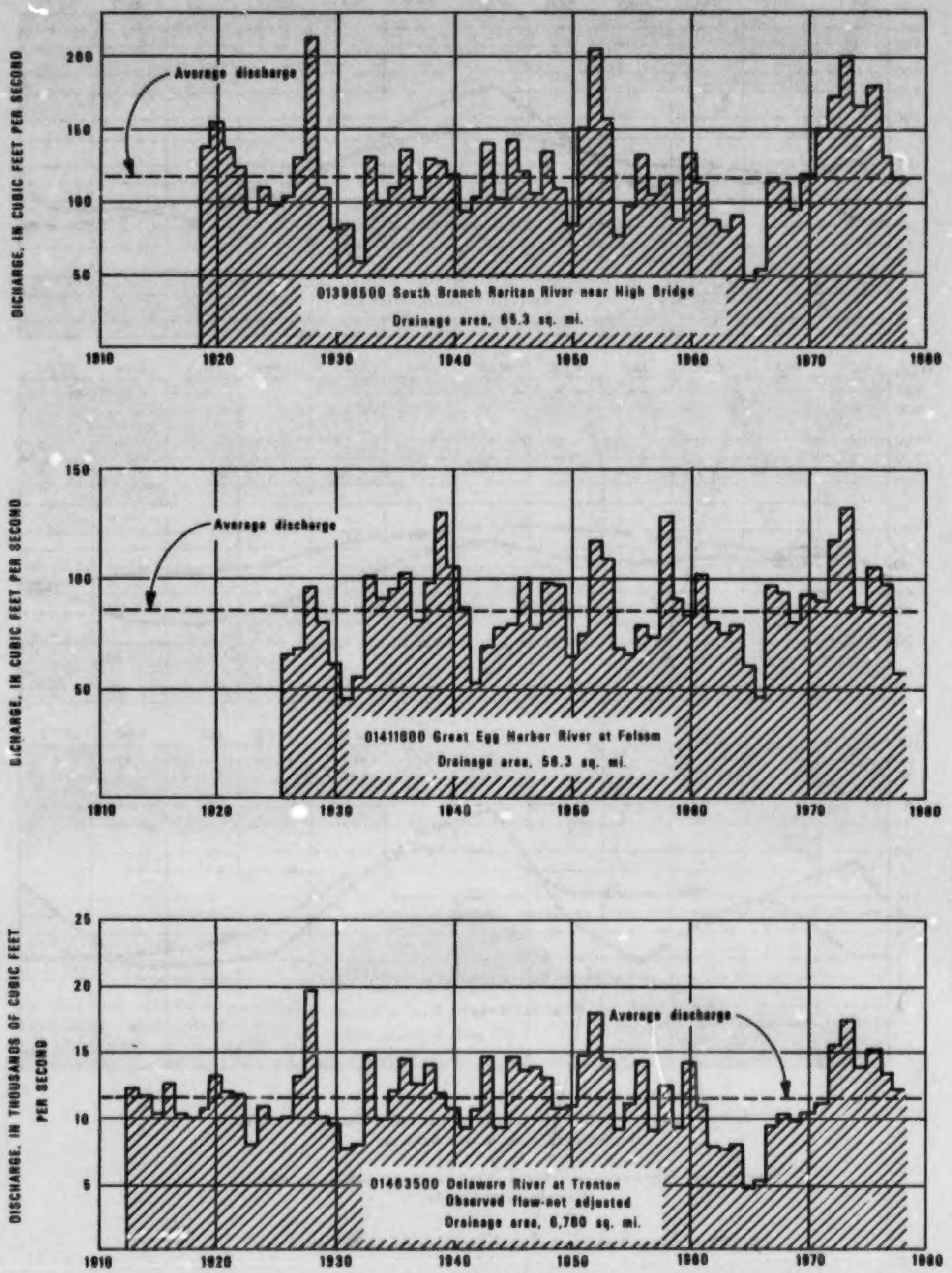


FIGURE 4.--ANNUAL MEAN DISCHARGE AT KEY GAGING STATIONS

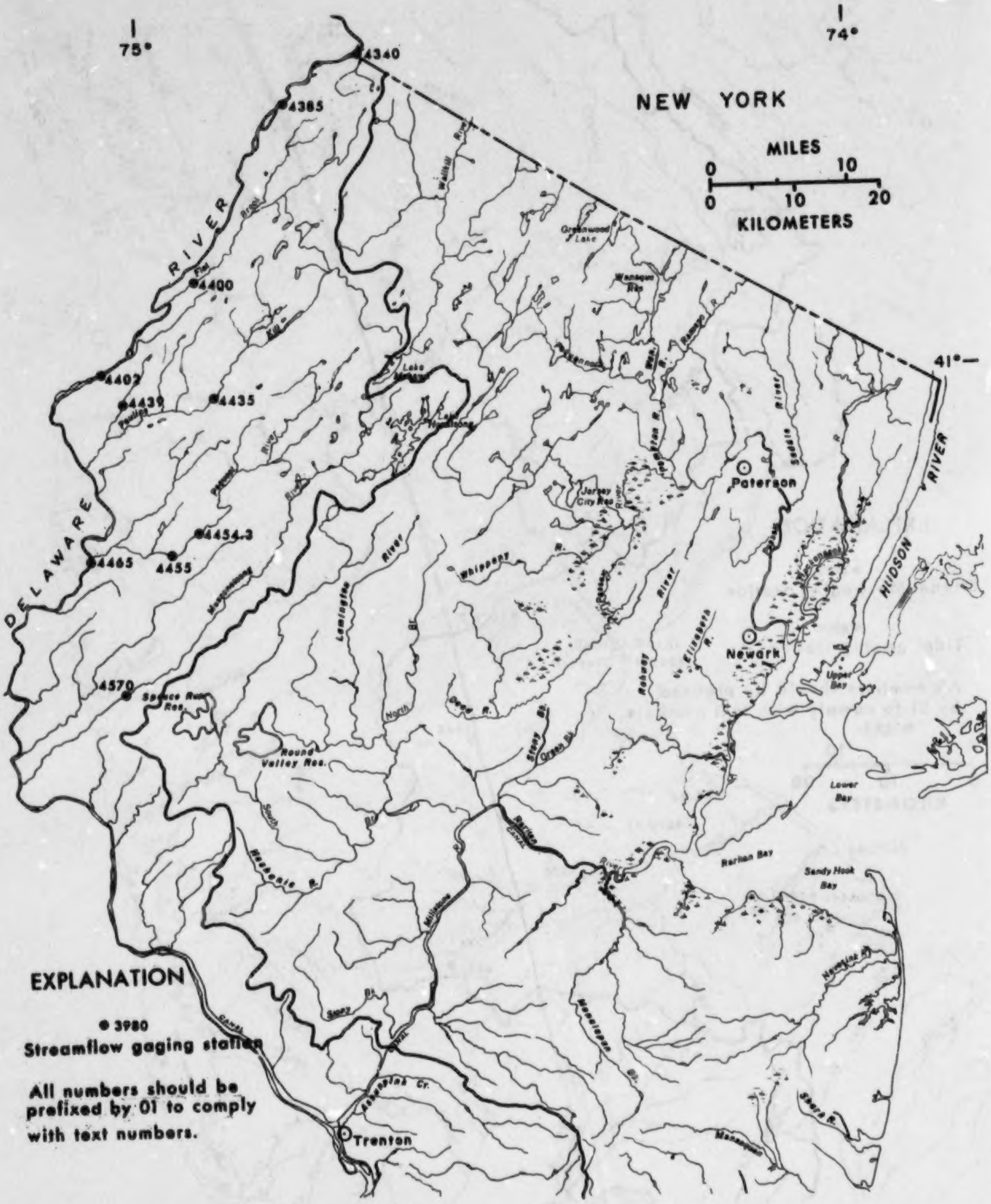

75°
74°
41°
4340
4385
4400
4402
4439
4435
4454.3
4455
4465
4570
NEW YORK
MILES
0
10
0
10
20
KILOMETERS
DELAWARE RIVER
HUDSON RIVER
Wallkill River
Greenwood Lake
Wanaque Res.
Lake Musconetcong
Lake Hopatcong
Paulins Kill
Pequest River
Musconetcong River
Jersey City Res.
Whippany R.
Passaic River
Rahway River
Elizabeth R.
Saddle River
Paterson
Newark
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Navesink R.
Shark R.
Manasquan
Spruce Run Res.
Round Valley Res.
Lamington River
North Br.
South Br.
Neshanic R.
Stony Br.
Green Br.
Millstone
Manalapan Br.
Assunpink Cr.
Canal
Trenton
EXPLANATION
● 3980
Streamflow gaging station
All numbers should be prefixed by 01 to comply with text numbers.

Figure 5.--Map showing location of gaging stations

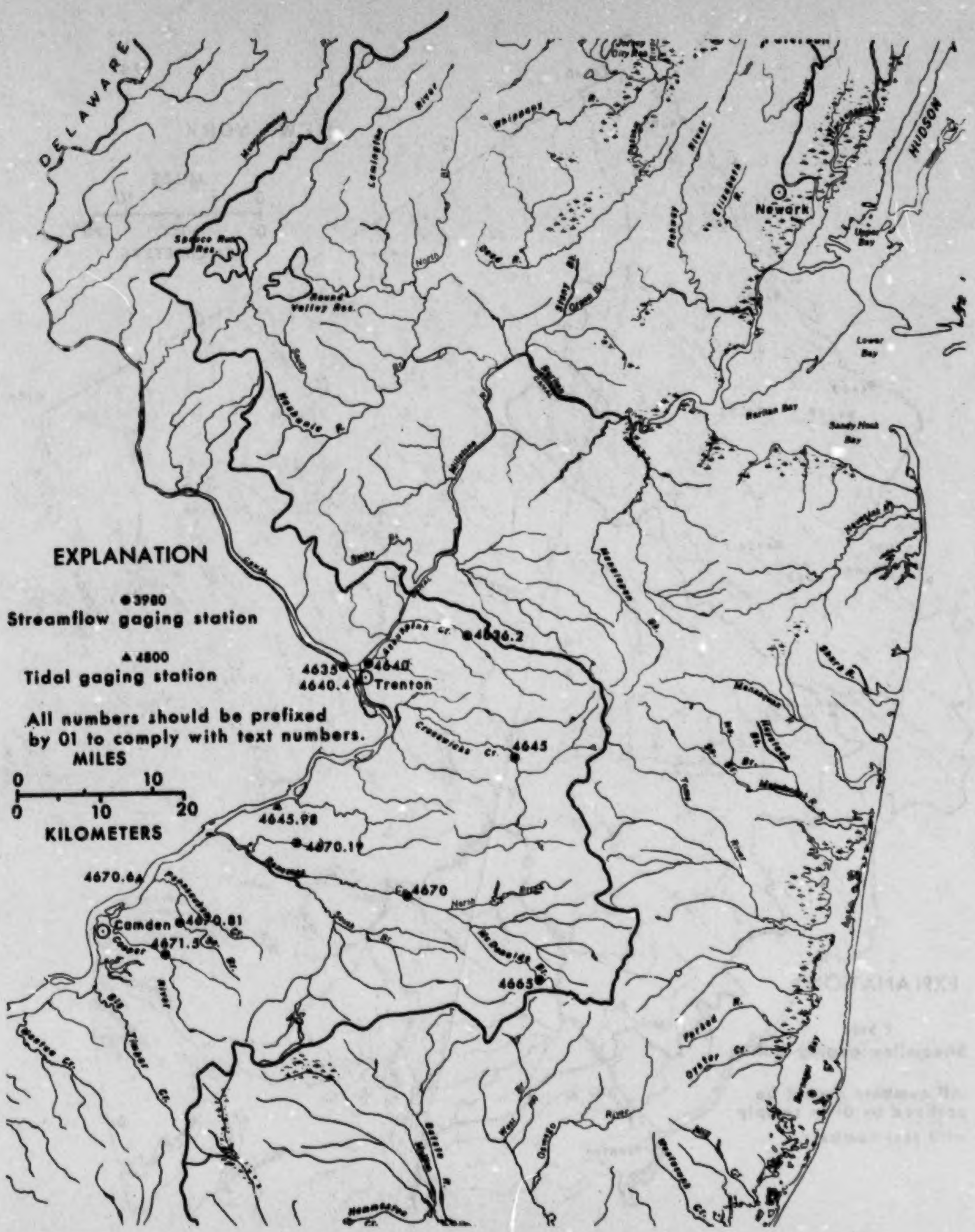

DELAWARE
HUDSON
Newark
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Spruce Run Res.
Round Valley Res.
Lamington River
Whippany R.
Rahway River
Passaic River
North Br.
South Br.
Millstone R.
Stony Br.
Assunpink Cr.
Crosswicks Cr.
Rancocas Cr.
North Br.
South Br.
Pennsauken Cr.
Cooper River
Big Timber Cr.
Manasquan R.
Shark R.
Metedeconk R.
Toms River
Forked R.
Oyster Cr.
Mullica River
EXPLANATION
●3980
Streamflow gaging station
▲4800
Tidal gaging station
All numbers should be prefixed by 01 to comply with text numbers.
MILES
0
10
0
10
20
KILOMETERS
4636.2
4635
4640
4640.4
Trenton
4645
4645.98
4670.17
4670.6
4670
Camden
4670.81
4671.5
4665

Figure 6.--Map showing location of gaging stations

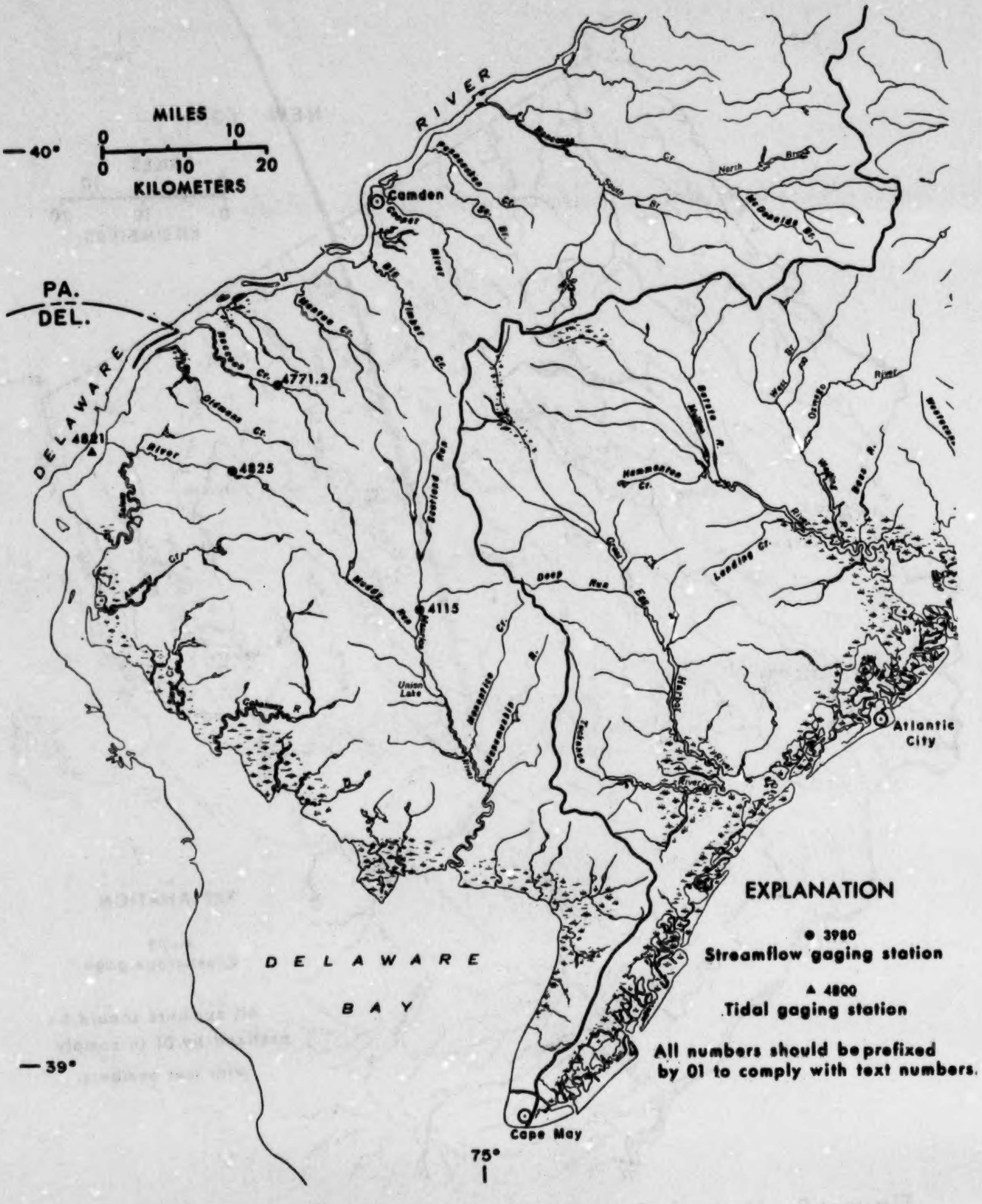

MILES
0
10
0
10
20
KILOMETERS
—40°
PA.
DEL.
DELAWARE
RIVER
Camden
Raccoon Cr.
4771.2
Oldmans Cr.
4821
River
4825
4115
Union Lake
Atlantic City
Cape May
DELAWARE
BAY
—39°
75°
EXPLANATION
● 3980
Streamflow gaging station
▲ 4800
Tidal gaging station
All numbers should be prefixed by 01 to comply with text numbers.

Figure 7.--Map showing location of gaging stations

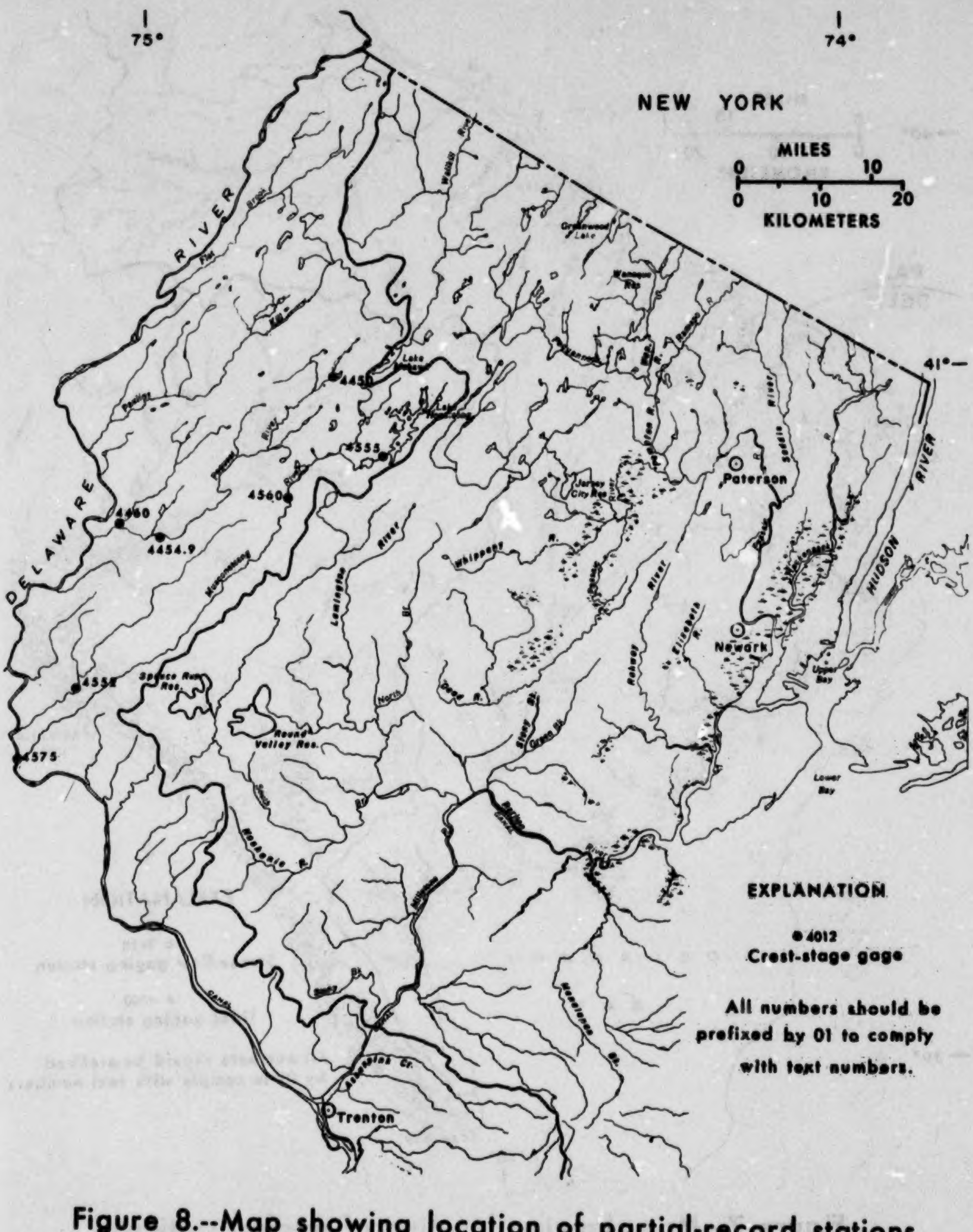

75°
74°
41°
NEW YORK
MILES
0
10
0
10
20
KILOMETERS
DELAWARE RIVER
HUDSON RIVER
Greenwood Lake
Wanaque Res.
Lake Hopatcong
4450
4555
4560
4460
4454.9
4532
4575
Spruce Run Res.
Round Valley Res.
Whippany R.
Lamington River
Musconetcong
Saddle River
Rahway River
Elizabeth R.
Paterson
Newark
Upper Bay
Lower Bay
Trenton
Assunpink Cr.
EXPLANATION
● 4012
Crest-stage gage
All numbers should be prefixed by 01 to comply with text numbers.

Figure 8.--Map showing location of partial-record stations

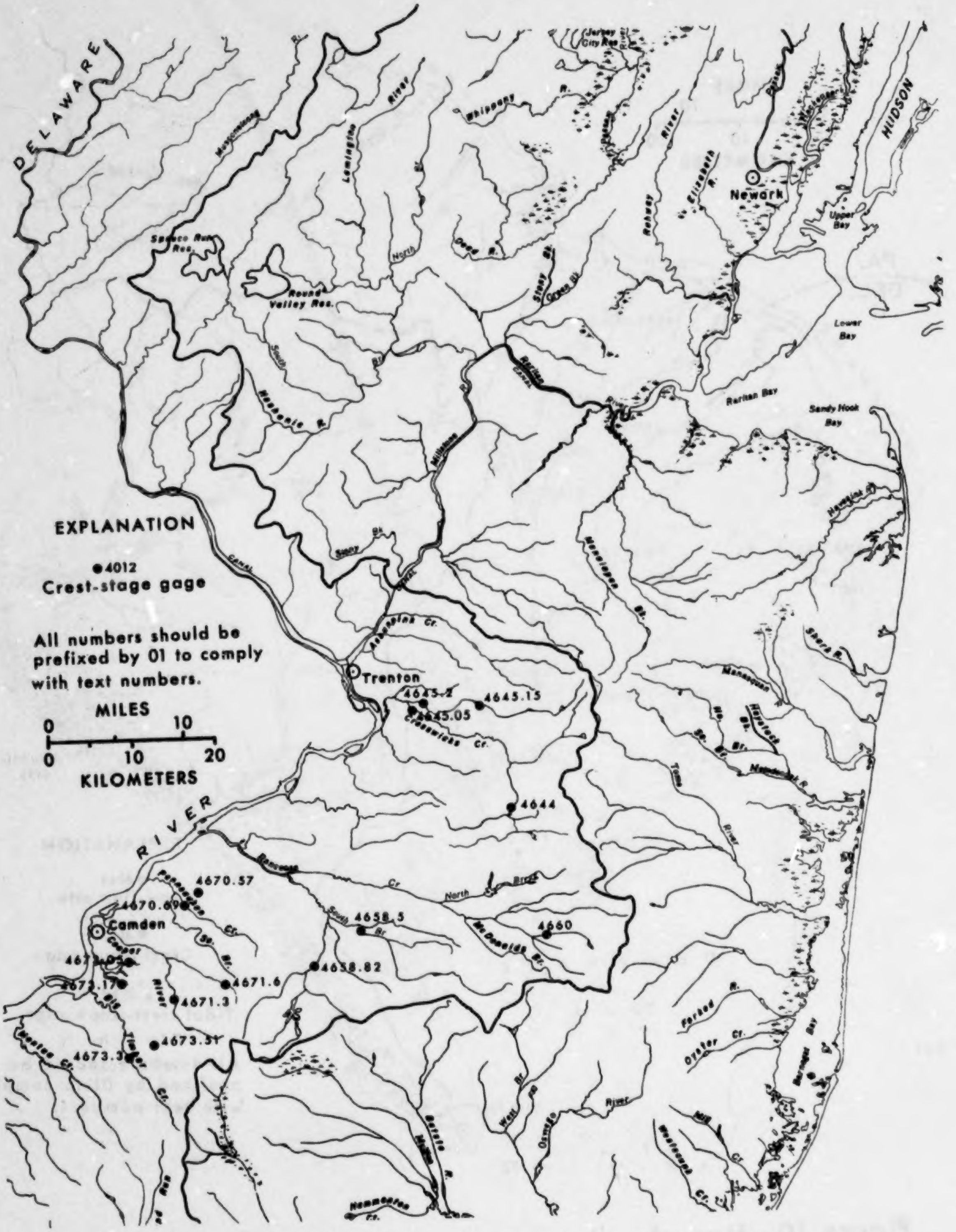

DELAWARE
RIVER
HUDSON
Newark
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Spruce Run Res.
Round Valley Res.
Trenton
Camden
Whippany R.
Rahway River
Elizabeth R.
Passaic R.
Millstone
Assunpink Cr.
Crosswicks Cr.
Manasquan
Metedeconk R.
Toms River
Rancocas Cr.
North Br.
South Br.
McDonalds Br.
Pennsauken Cr.
Cooper
Big Timber Cr.
Raccoon Cr.
Batsto R.
Mullica
Oswego River
Wading
Forked R.
Oyster Cr.
Barnegat Bay
Westecunk Cr.
Mill Cr.
Hammonton Cr.
4645.2
4645.15
4645.05
4644
4670.57
4670.69
4658.5
4660
4673.05
4673.17
4671.6
4658.82
4671.3
4673.51
4673.3
EXPLANATION
4012
Crest-stage gage
All numbers should be prefixed by 01 to comply with text numbers.
MILES
0
10
0
10
20
KILOMETERS

Figure 9.--Map showing location of partial-record stations

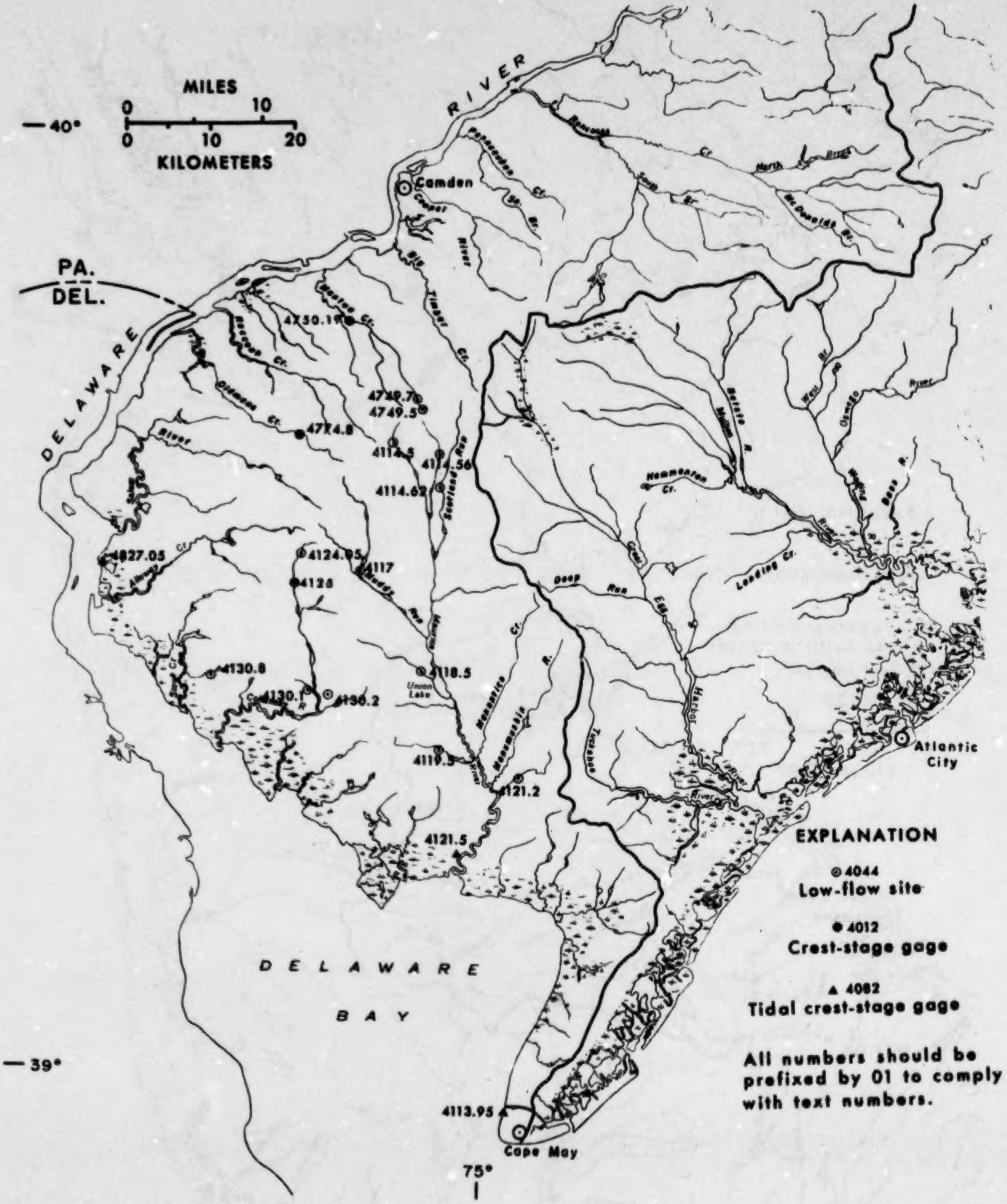

MILES
0
10
0
10
20
KILOMETERS
— 40°
— 39°
75°
PA.
DEL.
DELAWARE RIVER
DELAWARE BAY
Camden
Atlantic City
Cape May
Union Lake
Cooper River
Big Timber Cr.
Raccoon Cr.
Oldmans Cr.
Salem River
Alloway Cr.
Maurice River
Manantico Cr.
Manumuskin R.
Hammonton Cr.
Deep Run
Landing Cr.
Great Egg Harbor River
Tuckahoe River
Mullica River
Batsto R.
Oswego River
Wading River
Bass R.
Rancocas Cr.
North Branch
South Br.
McDonalds Br.
4750.19
4749.7
4749.5
4774.8
4114.5
4114.56
4114.62
4827.05
4124.05
4117
4126
4130.8
4130.1
4130.2
4118.5
4119.5
4121.2
4121.5
4113.95
EXPLANATION
⊙ 4044
Low-flow site
● 4012
Crest-stage gage
▲ 4082
Tidal crest-stage gage
All numbers should be prefixed by 01 to comply with text numbers.

Figure 10.--Map showing location of partial-record stations

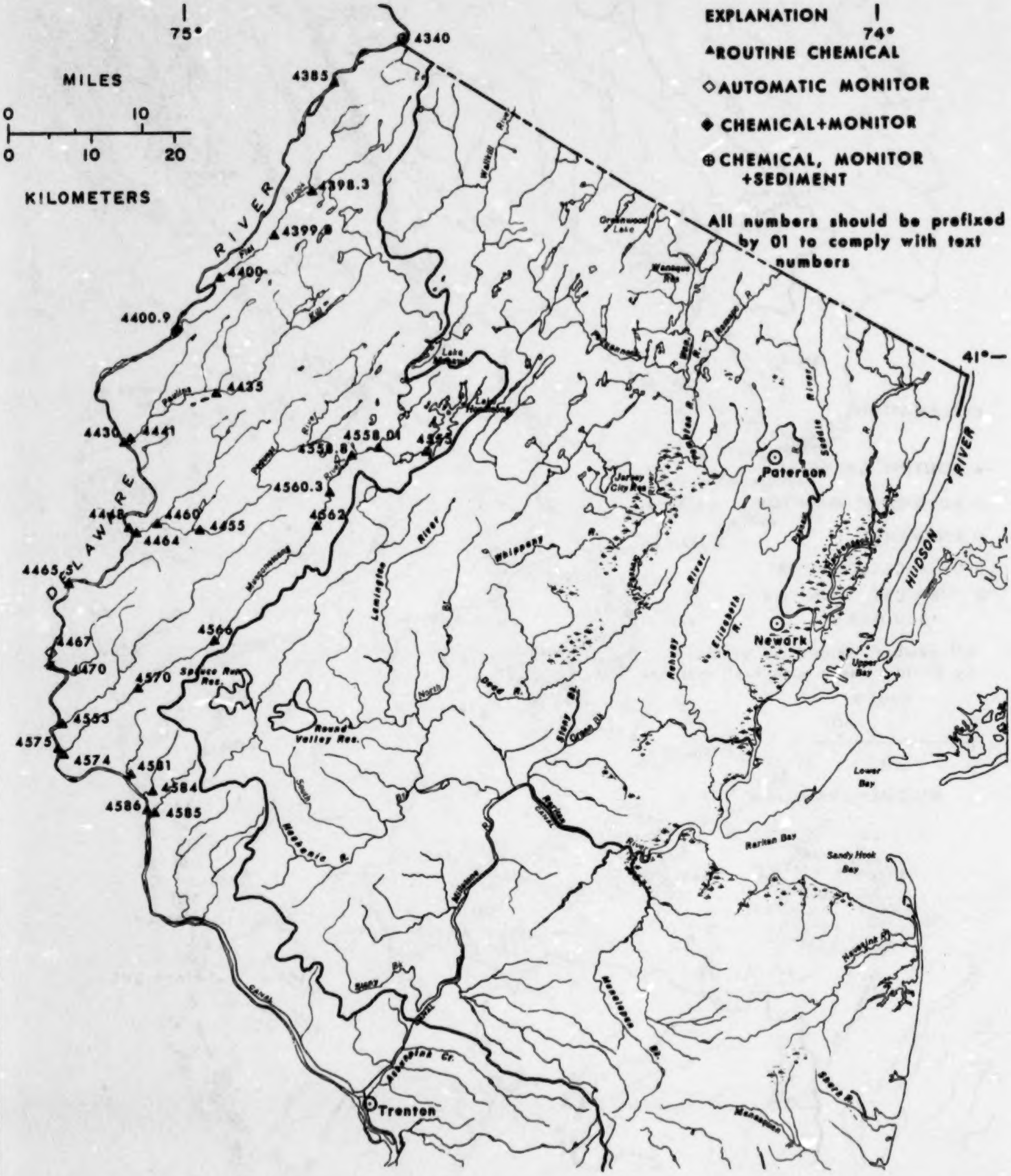

75°
MILES
0
10
0
10
20
KILOMETERS
EXPLANATION
74°
▲ROUTINE CHEMICAL
◇AUTOMATIC MONITOR
◆CHEMICAL+MONITOR
⊕CHEMICAL, MONITOR +SEDIMENT
All numbers should be prefixed by 01 to comply with text numbers
4340
4385
4398.3
4399.8
4400
4400.9
4435
4430
4441
4558.01
4558.81
4565
4560.3
4448
4460
4455
4464
4562
4465.5
4566
4467
4470
4570
4553
4575
4574
4581
4584
4586
4585
DELAWARE RIVER
HUDSON RIVER
Greenwood Lake
Wanaque Res.
Lake Hopatcong
Spruce Run Res.
Round Valley Res.
Paterson
Newark
Trenton
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
41°

Figure 11.--Map showing location of surface-water quality stations

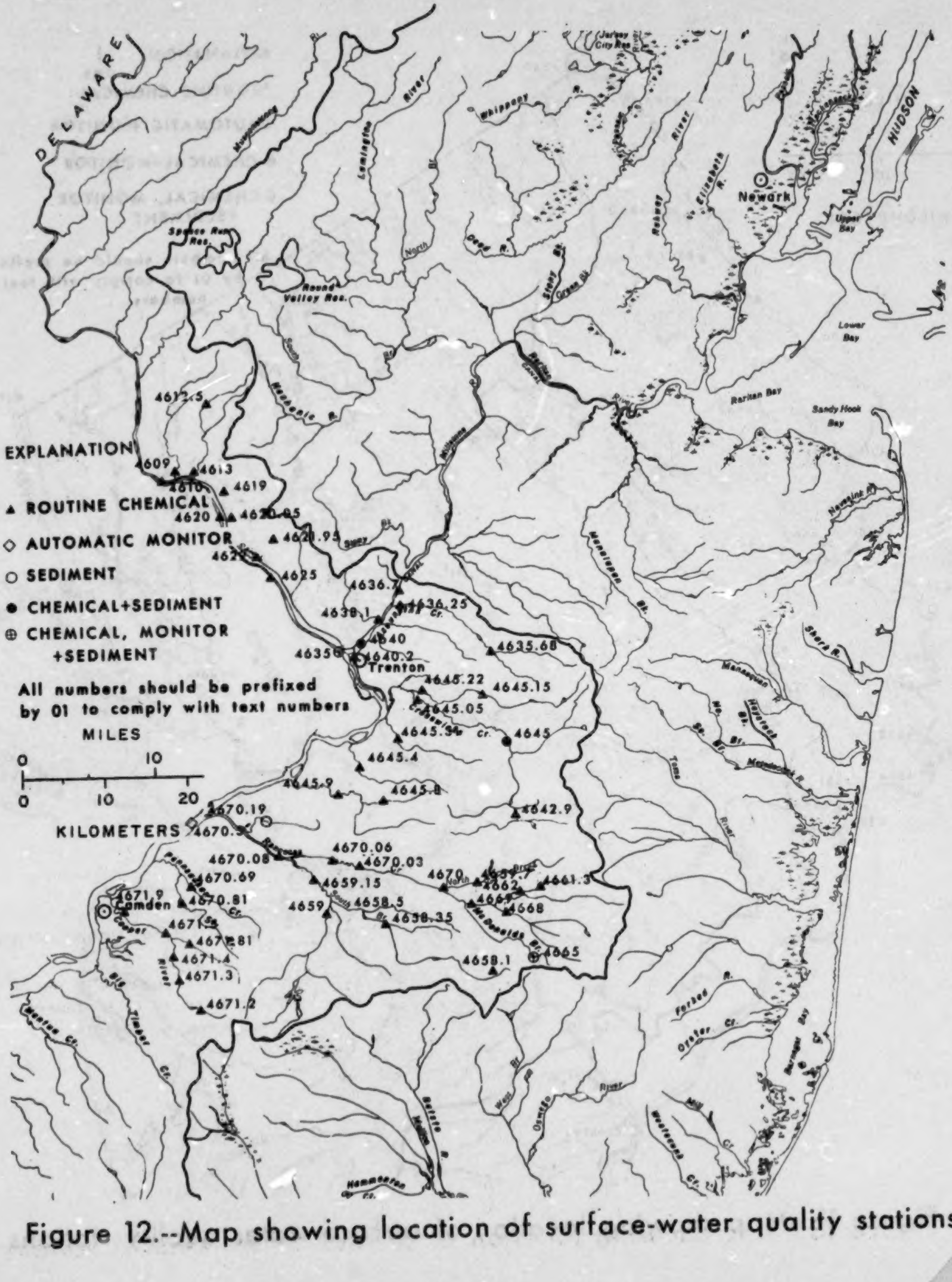

DELAWARE
Spruce Run Res.
Round Valley Res.
Whippany R.
Lamington River
Rahway River
Elizabeth R.
Newark
HUDSON
Upper Bay
Lower Bay
Raritan Bay
Sandy Hook Bay
Millstone
Manalapan Br.
Shark R.
Manasquan R.
Metedeconk R.
Toms River
Forked R.
Oyster Cr.
Barnegat Bay
Westecunk Cr.
Mullica R.
Batsto R.
Hammonton Cr.
Big Timber Cr.
Cooper River
Camden
Trenton
Crosswicks Cr.
Rancocas
McDonalds Br.
EXPLANATION
▲ ROUTINE CHEMICAL
◇ AUTOMATIC MONITOR
○ SEDIMENT
● CHEMICAL+SEDIMENT
⊕ CHEMICAL, MONITOR +SEDIMENT
All numbers should be prefixed by 01 to comply with text numbers
MILES
0 10
0 10 20
KILOMETERS
4612.5
4609
4613
4610
4619
4620
4620.95
4621.95
4625
4636.7
4636.25
4638.1
4640
4635
4640.2
4635.68
4645.22
4645.15
4645.05
4645.34
4645
4645.4
4645.9
4645.8
4642.9
4670.19
4670.06
4670.08
4670.03
4670.69
4670.81
4670
4662
4661.3
4659.15
4671.9
4659
4658.5
4668
4638.35
4671.4
4671.3
4665
4658.1
4671.2

Figure 12.--Map showing location of surface-water quality stations

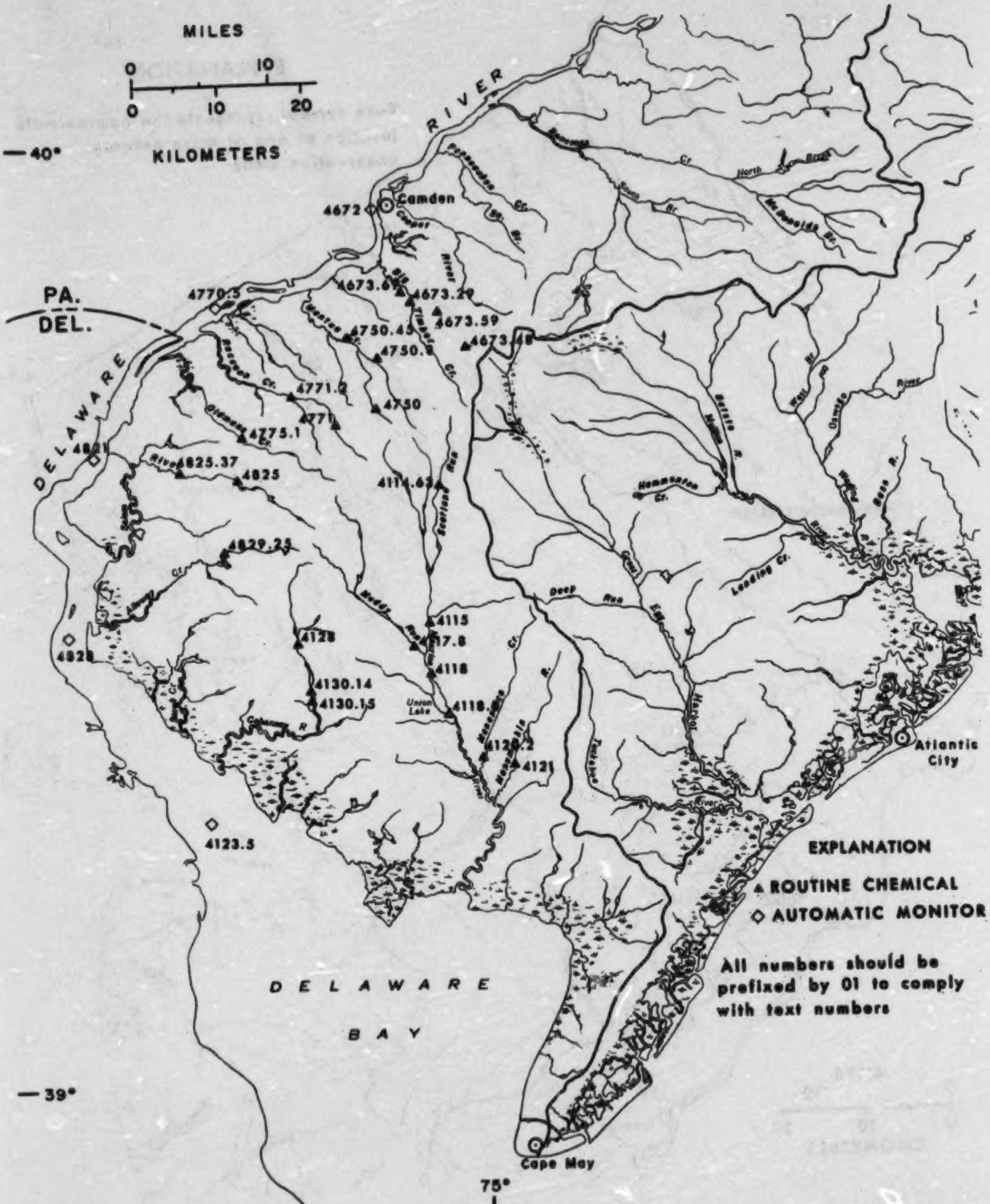

MILES
0
10
0
10
20
KILOMETERS
40°
39°
75°
RIVER
DELAWARE
PA.
DEL.
Camden
4672
4770.5
4673.67
4673.29
4673.59
4673.48
4750.45
4750.8
4750
4771.2
4771
4775.1
4821
4825.37
4825
4114.63
4829.25
4828
4128
4130.14
4130.15
4115
4117.8
4118
Union Lake
4118.8
4120.2
4121
4123.5
Cohansey R
Deep
Atlantic City
Cape May
DELAWARE BAY
EXPLANATION
▲ ROUTINE CHEMICAL
◇ AUTOMATIC MONITOR
All numbers should be prefixed by 01 to comply with text numbers

Figure 13.--Map showing location of surface-water quality stations

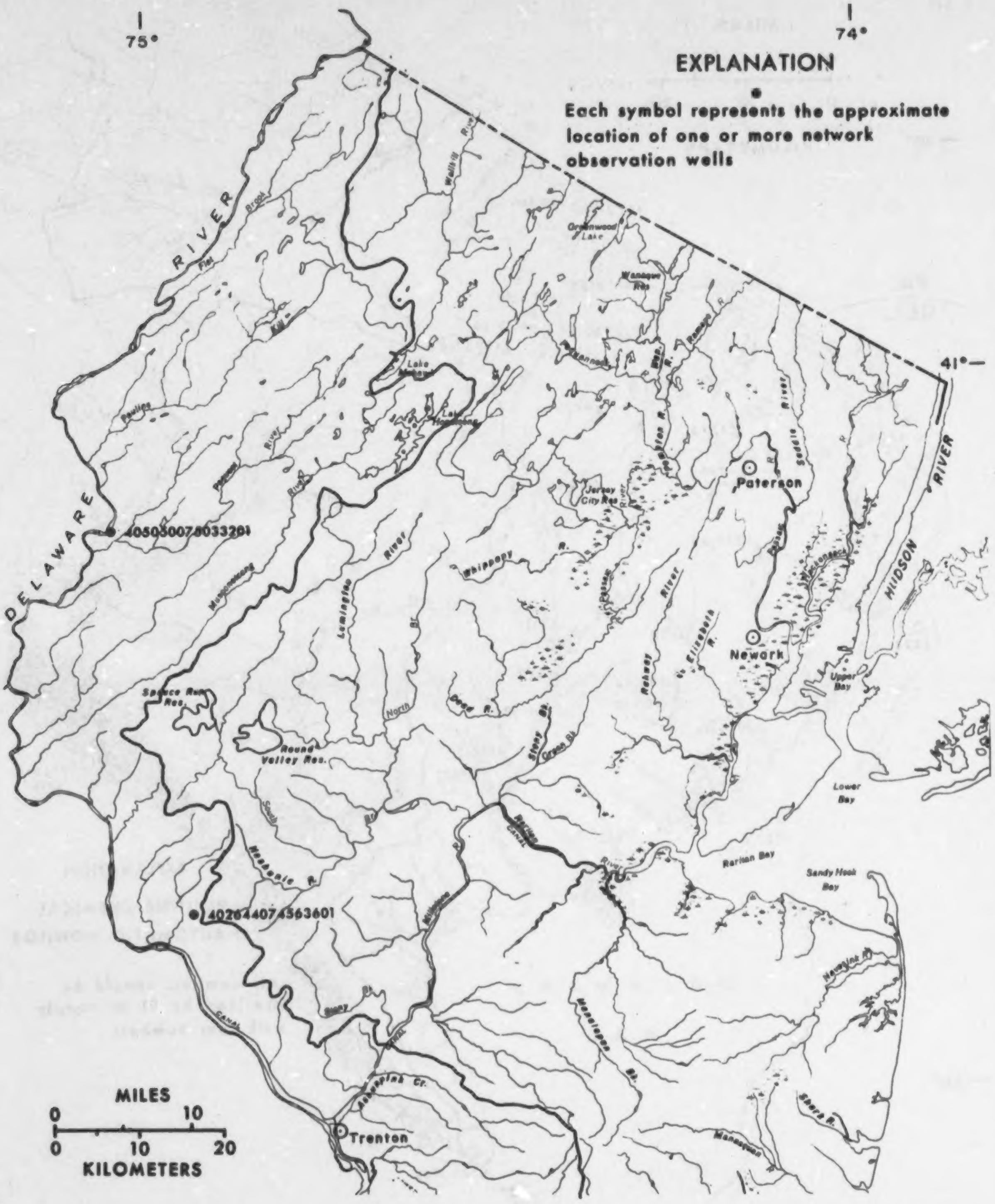
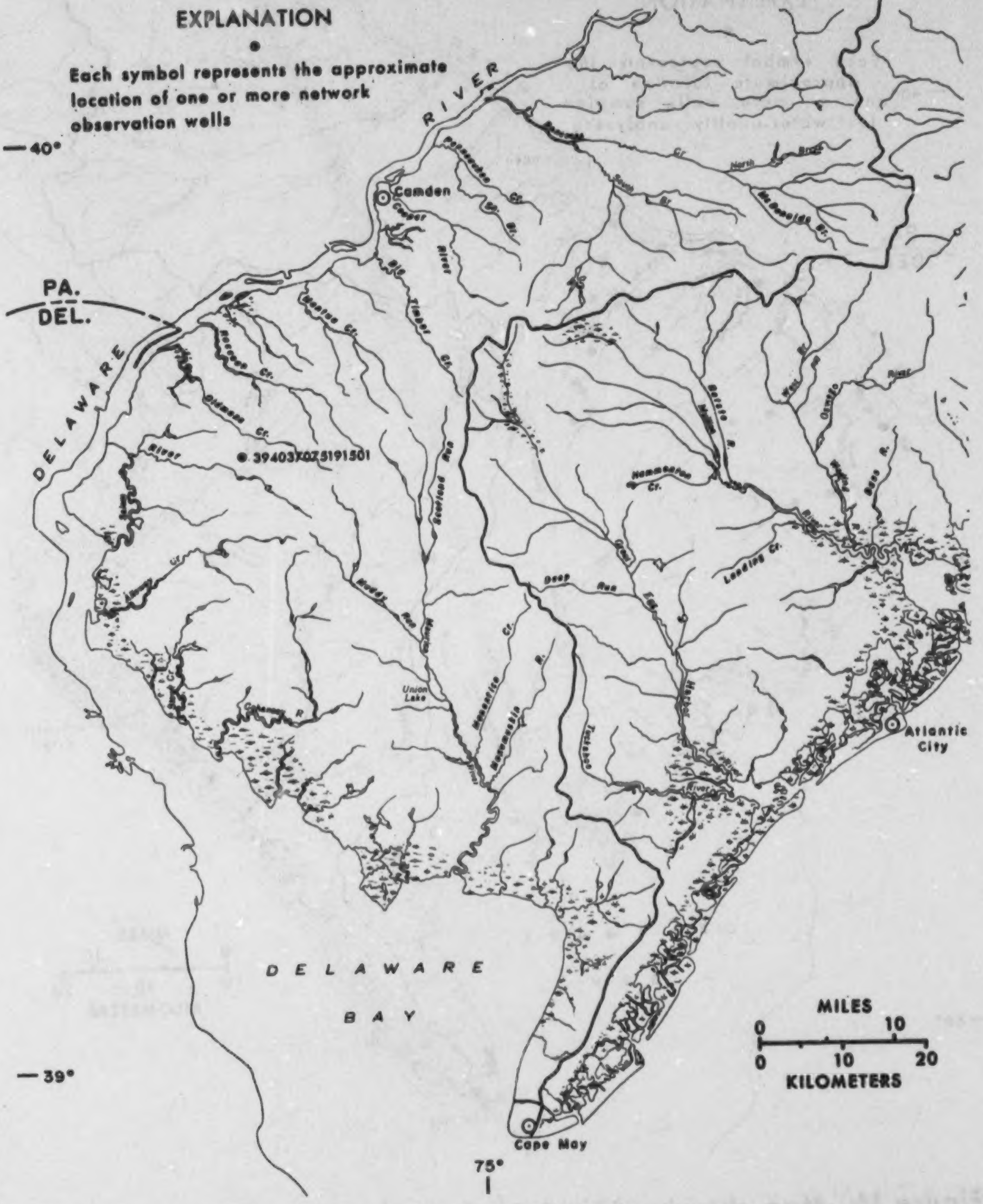

75°
74°
41°
EXPLANATION
●
Each symbol represents the approximate location of one or more network observation wells
DELAWARE RIVER
HUDSON RIVER
Greenwood Lake
Wanaque Res.
Lake Hopatcong
Jersey City Res.
Paterson
Newark
Spruce Run Res.
Round Valley Res.
Whippany R.
Rockaway R.
Passaic R.
Raritan Bay
Upper Bay
Lower Bay
Sandy Hook Bay
Assunpink Cr.
Trenton
Manasquan
Shark R.
Navesink R.
405030075033201
402644074563601
MILES
0
10
0
10
20
KILOMETERS

Figure 14.--Map showing location of ground-water observation wells



EXPLANATION

● Each symbol represents the approximate location of one or more network observation wells

40°
39°
75°
PA.
DEL.
DELAWARE RIVER
Camden
Cooper River
Big Timber Cr.
Raccoon Cr.
Oldmans Cr.
Salem River
● 39403X075191501
Maurice River
Union Lake
Cohansey R.
Hammonton Cr.
Landing Cr.
Deep Run
Great Egg Harbor River
Tuckahoe River
Atlantic City
Cape May
DELAWARE BAY
MILES
0
10
0
10
20
KILOMETERS

Figure 15.--Map showing location of ground-water observation wells

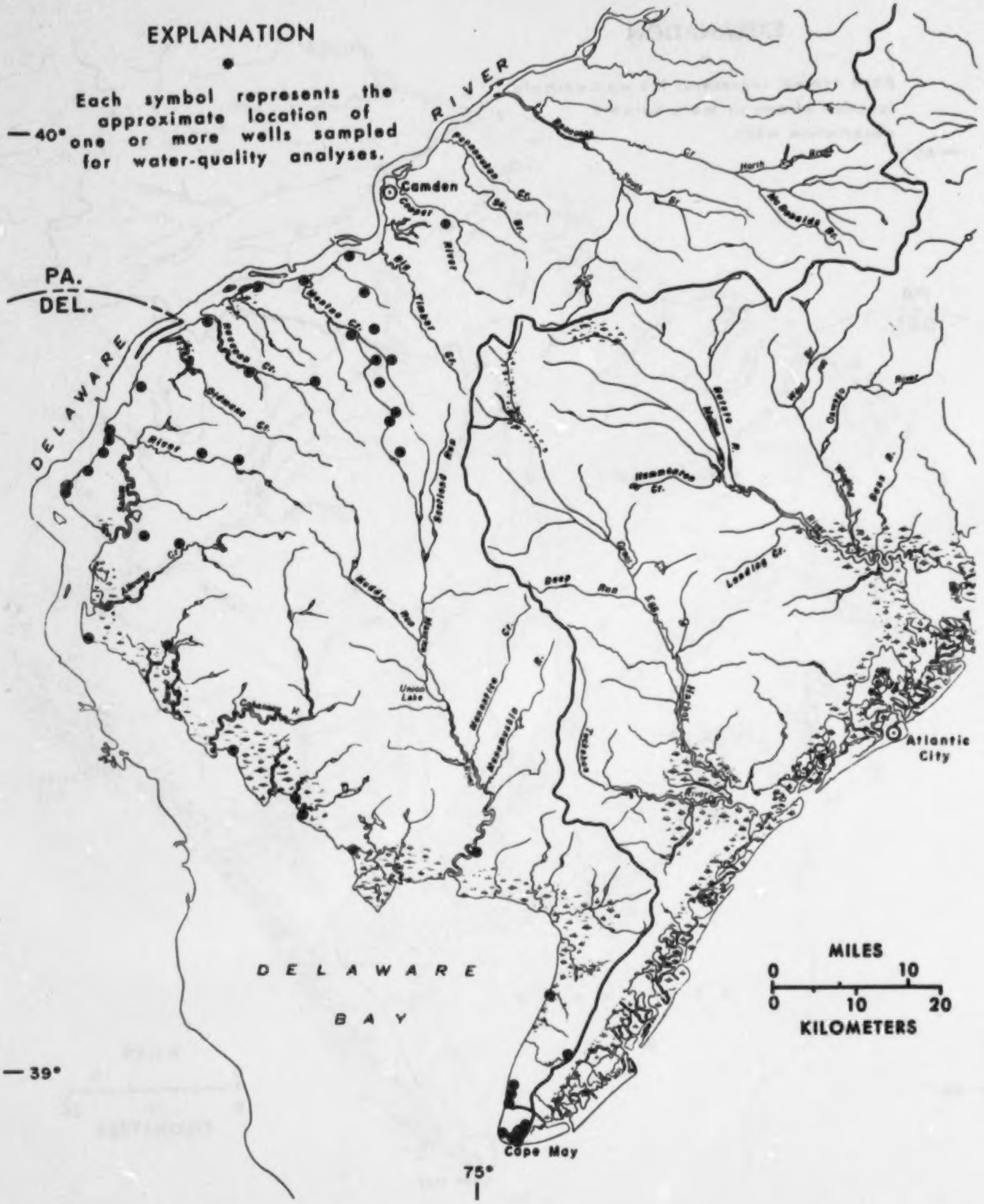

EXPLANATION
●
Each symbol represents the approximate location of one or more wells sampled for water-quality analyses.
40°
RIVER
DELAWARE
PA.
DEL.
Camden
Cooper River
Union Lake
Atlantic City
DELAWARE BAY
MILES
0
10
0
10
20
KILOMETERS
39°
Cape May
75°

Figure 16.--Map showing location of ground-water quality stations

01411463 SCOTLAND RUN NEAR FRANKLINVILLE, NJ

LOCATION.--Lat 39°35'43", long 75°03'51", Gloucester County, Hydrologic Unit 02040206, at bridge on State Route 47, 1.1 mi (1.8 km) east of Porchtown, 1.5 mi (2.4 km) southeast of Franklinville, and 1.1 mi (1.8 km) upstream of Malaga Lake.

DRAINAGE AREA.--16.4 mi² (42.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./ 100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)
OCT 06...	1010	50	6.5	16.0	2	8.9	3.4	B22	23	--
NOV 17...	0925	60	6.0	4.0	1	11.7	1.2	B16	<20	B16
MAR 03...	0915	60	5.2	6.0	4	12.0	1.2	<2	<2	B18
APR 06...	0930	61	4.8	10.0	5	10.2	1.2	--	2	--
MAY 18...	0920	41	5.9	16.0	2	8.9	.6	240	79	360
JUN 15...	1000	45	5.8	18.0	1	8.0	.6	B570	130	3000
JUL 27...	0910	75	5.8	23.0	1	7.5	2.4	--	23	--
AUG 08...	0930	43	5.5	27.0	1	5.8	1.6	--	23	--
SEP 29...	1315	46	6.3	18.5	1	8.8	1.3	--	130	--

DATE	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT 06...	<2	13	7	2.2	1.8	2.4	1.4	7	0	6
NOV 17...	<2	15	10	2.6	2.0	2.7	1.4	6	0	5
MAR 03...	2	18	17	4.8	1.5	3.0	1.6	1	0	1
APR 06...	49	20	19	4.5	2.2	3.2	1.5	1	0	1
MAY 18...	170	15	12	1.9	2.6	2.6	1.1	4	0	3
JUN 15...	220	13	9	2.9	1.4	2.5	1.2	5	0	4
JUL 27...	79	12	8	2.4	1.5	3.0	1.3	5	0	4
AUG 08...	33	11	7	1.8	1.5	2.6	1.5	5	0	4
SEP 29...	240	11	7	1.8	1.6	2.7	1.4	5	0	4

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 06...	3.5	.8	5.4	4.8	6.5	44	4	--	--
NOV 17...	9.6	--	9.9	4.7	--	42	10	--	--
MAR 03...	10	--	12	4.8	--	48	9	--	--
APR 06...	25	--	12	5.0	--	60	63	--	--
MAY 18...	8.1	--	5.1	4.2	--	34	2	--	--
JUN 15...	13	--	6.7	4.8	--	36	3	--	--
JUL 27...	13	--	7.6	5.0	--	72	13	.06	.01
AUG 08...	25	--	6.1	5.7	--	48	5	.18	.00
SEP 29...	4.0	--	7.6	5.2	--	31	4	.35	.01

01411463 SCOTLAND RUN NEAR FRANKLINVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 06...	--	--	1.1	120	--	.00	--	--	2.3
NOV 17...	--	--	1.7	--	--	.00	--	2.6	--
MAR 03...	--	--	1.4	--	--	.03	--	4.6	--
APR 06...	--	--	1.3	--	--	.04	--	--	--
MAY 18...	--	--	1.1	--	--	.01	--	5.6	--
JUN 15...	--	--	1.3	--	--	.01	--	6.1	--
JUL 27...	.09	.70	.79	--	.86	.03	.00	7.1	--
AUG 08...	.04	.66	.70	--	.88	.01	.00	5.3	--
SEP 29...	.02	.25	.27	--	.63	.01	.00	9.8	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 06...	1010	40	40	0	0	10	3	0	5	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 06...	1	0	10	0	190	120	1600	49	96	0

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 06...	11	<.5	.0	6	0	0	10	14	2	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 06...	0	.0	.0	.0	.4	.0	.0	.1	.0	0

01411500 MAURICE RIVER AT NORMA, NJ

LOCATION.--Lat 39°29'42", long 75°04'38", Salem County, Hydrologic Unit 02040206, on right bank just upstream from Almond Road Bridge at Norma, and 0.8 mi (1.3 km) downstream from Blackwater Branch.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1932 to current year. Monthly discharge only for December 1933, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1923, 1953, 1960-62, 1966 to current year.
SEDIMENT ANALYSES: Water years 1965-68.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: July 1932 to current year.
WATER TEMPERATURES: October 1966 to January 1968.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to January 1968.

REVISED DISCHARGE RECORDS.--WSP 1382: 1933.

GAGE.--Water-stage recorder. Concrete control since Dec. 27, 1937. Datum of gage is 46.94 ft (14.307 m) NGVD.

REMARKS.--Discharge records good. Occasional regulation by ponds above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--45 years, 167 ft³/s (4.729 m³/s), 20.07 in/yr (510 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 211 ft³/s (5.98 m³/s) Aug. 24, gage height, 3.07 ft (0.936 m), no peak above base of 380 ft³/s (10.8 m³/s); minimum, 26 ft³/s (0.74 m³/s) July 24, gage height, 2.26 ft (0.689 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,360 ft³/s (208 m³/s) Sept. 2, 1940 (gage height, 8.72 ft or 2.658 m) from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 23 ft³/s (0.65 m³/s) Sept. 8, 1964, July 2, Sept. 7, 11-13, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	194	87	89	83	204	133	128	54	52	50	60
2	80	172	85	85	80	186	140	121	57	49	41	56
3	85	154	83	83	80	162	175	115	57	47	51	54
4	86	139	78	83	80	148	176	108	55	45	48	51
5	82	131	76	83	80	143	191	105	54	41	41	46
6	85	123	74	80	80	137	200	107	55	42	38	58
7	81	115	108	80	78	130	198	109	59	50	37	68
8	76	110	148	80	76	127	192	105	56	49	41	57
9	98	105	145	80	76	125	181	99	72	48	37	54
10	120	103	142	113	74	122	166	95	96	45	44	58
11	127	98	136	142	78	119	153	92	96	43	48	57
12	130	98	128	148	83	114	145	89	91	55	46	55
13	116	93	123	145	89	110	137	86	83	69	45	52
14	101	93	115	136	98	115	131	83	74	59	45	50
15	91	91	108	134	103	115	126	78	70	56	47	48
16	84	91	103	126	105	112	122	66	67	52	42	46
17	81	91	98	115	105	104	117	81	62	50	49	48
18	81	91	93	108	100	118	114	74	58	47	51	49
19	76	89	91	103	96	139	112	70	55	47	45	50
20	87	87	91	98	93	136	109	69	52	58	45	54
21	137	85	105	96	91	135	106	48	50	48	43	54
22	134	83	93	93	89	157	102	44	47	40	41	51
23	138	83	108	91	89	196	100	52	45	33	41	51
24	137	80	100	91	100	196	98	58	43	26	102	50
25	133	80	96	89	172	196	100	57	42	33	148	49
26	173	80	105	89	184	186	105	55	44	45	111	55
27	181	78	108	89	189	170	114	54	43	42	104	57
28	177	78	103	89	200	155	121	54	44	42	89	59
29	172	87	100	89	---	150	136	54	59	41	74	59
30	167	89	98	87	---	150	134	54	55	50	66	59
31	173	---	93	85	---	144	---	54	---	39	69	---
TOTAL	3572	3091	3221	3099	2851	4501	4134	2464	1795	1443	1779	1607
MEAN	115	103	104	100	102	145	138	79.5	59.8	46.5	57.4	53.6
MAX	181	194	148	148	200	204	200	128	96	69	148	68
MIN	76	78	74	80	74	104	98	44	42	26	37	46
CFSM	1.02	.91	.92	.89	.90	1.28	1.22	.70	.53	.41	.51	.47
IN.	1.18	1.02	1.06	1.02	.94	1.48	1.36	.81	.59	.48	.59	.53

CAL YR 1976 TOTAL 51508 MEAN 141 MAX 499 MIN 43 CFSM 1.25 IN 16.96
WTR YR 1977 TOTAL 33557 MEAN 91.9 MAX 204 MIN 26 CFSM .81 IN 11.05

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
NOV 17...	1230	91	87	7.2	5.0	2	11.7	1.9	834	5
DEC 21...	1130	105	--	--	--	--	--	--	--	--
MAR 03...	1100	172	82	5.9	6.0	3	12.3	1.8	820	13
APR 06...	1310	200	72	6.0	11.0	2	9.4	1.3	44	<2
MAY 18...	1235	74	81	6.2	21.0	2	8.7	1.1	89	79
JUN 15...	1345	70	82	6.1	20.5	1	8.2	1.0	140	33
JUL 27...	1215	42	83	6.2	19.5	1	8.4	1.0	--	110
AUG 08...	1020	42	70	5.9	24.5	1	5.4	1.0	--	170
SEP 29...	1240	59	78	6.3	17.0	1	8.6	1.2	--	79

DATE	FECAL STREPTOCOCCI MF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV 17...	66	5	24	16	5.2	2.7	6.3	1.8	10
DEC 21...	--	--	--	--	--	--	--	--	--
MAR 03...	270	2	14	10	3.0	1.6	6.7	2.1	5
APR 06...	150	17	23	21	5.3	2.4	5.5	1.7	2
MAY 18...	800	49	11	6	1.4	1.8	6.9	1.9	6
JUN 15...	2800	130	19	14	4.5	1.9	7.3	1.7	6
JUL 27...	--	39	17	12	3.6	2.0	6.7	1.8	6
AUG 08...	--	8	16	8	3.1	2.1	6.0	2.1	10
SEP 29...	--	920	17	11	3.3	2.1	6.2	2.0	7

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 17...	0	8	1.0	--	13	7.7	--	61	3
DEC 21...	--	--	--	--	--	--	--	--	--
MAR 03...	0	4	10	--	16	7.2	--	64	5
APR 06...	0	2	3.2	--	12	7.1	--	66	7
MAY 18...	0	5	6.1	.0	9.9	8.2	4.1	21	9
JUN 15...	0	5	7.6	--	11	7.9	--	62	0
JUL 27...	0	5	6.1	--	8.4	8.3	--	72	13
AUG 08...	0	8	20	--	6.7	8.4	--	62	5
SEP 29...	0	6	5.6	--	9.1	8.1	--	54	1

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	--	1.2	--	.02	--	3.6
DEC 21...	--	--	--	--	--	--	--	--	--
MAR 03...	--	--	--	--	1.4	--	.04	--	5.8
APR 06...	--	--	--	--	1.4	--	.07	--	--
MAY 18...	--	--	--	--	1.4	--	.11	--	4.2
JUN 15...	--	--	--	--	1.1	--	.03	--	5.3
JUL 27...	1.6	.00	.07	.50	.57	2.2	.05	.03	5.5
AUG 08...	1.3	.01	.06	.36	.42	1.7	.04	.02	4.6
SEP 29...	1.5	.00	.03	.19	.22	1.7	.03	.01	8.3

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)
DEC 21...	1130	--	100	32	--	--	--	--	--
MAY 18...	1235	60	1	--	80	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
DEC 21...	--	--	--	--	--	--	--	--
MAY 18...	330	0	30	.0	3	0	20	2

01411780 MUDDY RUN NEAR NORMA, NJ

LOCATION.--Lat 39°28'13", long 75°05'36", Salem County, Hydrologic Unit 02040206, at bridge on Lebanon Road, 1.0 mi (1.6 km) upstream of confluence with Maurice River, 1.6 mi (2.6 km) southeast of Rainbow Lake, and 1.6 mi (2.6 km) south of Norma.

DRAINAGE AREA.--56.5 mi² (146.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM ,TUM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
NOV 17...	1130	118	7.2	4.5	2	11.9	2.2	80	8	360
MAR 03...	1200	96	6.6	8.0	25	12.0	2.6	814	13	8160
APR 06...	1225	89	6.4	11.5	4	10.5	1.8	130	2	32
MAY 18...	1140	101	6.6	21.0	2	8.0	1.3	846	79	2200
JUN 15...	1220	90	6.4	21.0	1	7.8	1.3	170	79	3400
JUL 27...	1130	94	6.6	21.5	5	7.8	5.6	--	130	--
AUG 08...	1100	90	6.4	25.0	7	2.3	3.7	--	220	--
SEP 29...	1145	91	6.7	17.5	2	8.4	2.5	--	350	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
NOV 17...	20	33	20	7.1	3.8	4.5	2.7	16	0
MAR 03...	130	43	36	10	4.3	4.1	3.7	9	0
APR 06...	920	34	27	8.0	3.5	4.2	2.4	9	0
MAY 18...	23	29	18	6.4	3.1	5.5	2.3	13	0
JUN 15...	9	30	16	6.9	3.0	5.0	2.2	17	0
JUL 27...	1600	23	9	3.8	3.3	5.2	2.0	17	0
AUG 08...	240	26	10	5.4	3.0	4.8	2.3	20	0
SEP 29...	540	26	13	5.6	3.0	4.7	2.4	16	0

DATE	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV 17...	13	1.6	--	15	9.8	--	60	7	--
MAR 03...	7	3.6	--	15	8.4	--	85	15	--
APR 06...	7	5.7	--	14	8.4	--	72	3	--
MAY 18...	11	5.2	.0	9.7	11	3.4	76	4	--
JUN 15...	14	11	--	9.7	10	--	68	8	--
JUL 27...	14	6.8	--	8.0	9.8	--	520	15	.79
AUG 08...	16	13	--	5.7	10	--	69	5	.78
SEP 29...	13	5.1	--	10	9.9	--	58	0	.75

01411780 MUDDY RUN NEAR NORMA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	--	--	--	1.2	--	--	.01	--	3.0
MAR 03...	--	--	--	1.5	--	--	.10	--	7.0
APR 06...	--	--	--	1.4	--	--	.05	--	--
MAY 18...	--	--	--	1.4	--	--	.04	--	5.7
JUN 15...	--	--	--	1.5	--	--	.02	--	5.6
JUL 27...	.00	.09	1.5	1.6	--	2.4	.09	.01	5.8
AUG 08...	.02	.27	1.0	1.3	--	2.1	.05	.01	5.1
SEP 29...	.00	.03	.51	.54	960	1.3	.06	.00	9.5

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 18...	1140	20	3	--	50	0	--	--	0	0
SEP 29...	1145	--	--	1	--	--	<10	30	--	--

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 18...	--	0	--	300	--	9	--	50	--	.0
SEP 29...	<10	--	<10	--	420	--	20	--	20	--

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
MAY 18...	--	5	--	0	0	--	0	--	--	--
SEP 29...	.0	--	<10	--	--	0	--	0	.0	0

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
MAY 18...	--	--	--	--	--	--	--	--	--
SEP 29...	.0	.0	.0	.0	.0	.0	.0	.0	0

01411800 MAURICE RIVER NEAR MILLVILLE, NJ

LOCATION.--Lat 39°26'52", long 75°04'22", Cumberland County, Hydrologic Unit 02040206, at bridge on Sherman Avenue, 3.5 mi (5.6 km) north of mouth of Union Lake at Millville, and 4.0 mi (6.4 km) southwest of Vineland.

DRAINAGE AREA.--193 mi² (500 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 17...	1100	108	7.0	4.5	2	11.6	.4	74	33	210	2	24
MAR 02...	0810	89	6.7	5.0	9	10.5	1.8	818	11	190	5	18
APR 06...	1130	82	6.3	10.5	3	10.2	1.3	110	<2	150	170	44
MAY 18...	1105	99	6.4	19.5	4	7.9	1.2	50	33	81000	2	20
JUN 15...	1140	99	6.2	20.0	1	7.4	1.2	210	50	85000	17	22
JUL 27...	1045	105	6.5	18.0	4	9.8	2.0	--	110	--	22	20
AUG 08...	1140	94	6.3	24.0	2	6.2	1.9	--	79	--	33	18
SEP 29...	1040	101	6.6	16.0	2	8.2	1.1	--	350	--	350	20

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
NOV 17...	12	4.8	2.8	7.9	2.3	15	0	12	2.4	13	10	71
MAR 02...	9	3.6	2.1	5.6	2.5	11	0	9	3.5	14	8.0	62
APR 06...	38	13	2.9	5.7	2.0	7	0	6	5.6	13	8.5	72
MAY 18...	10	3.9	2.4	9.0	2.3	12	0	10	7.6	10	11	72
JUN 15...	11	4.9	2.3	8.8	2.2	13	0	11	13	10	11	86
JUL 27...	8	4.4	2.2	9.5	2.3	15	0	12	7.6	7.9	12	69
AUG 08...	6	3.7	2.2	9.3	2.6	15	0	12	12	6.8	12	62
SEP 29...	7	3.9	2.4	8.1	2.4	16	0	13	6.4	9.6	11	43

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	13	--	--	--	--	1.7	--	--	.02	--	7.1
MAR 02...	4	--	--	--	--	1.5	--	--	.07	--	6.4
APR 06...	142	--	--	--	--	1.4	--	--	.06	--	--
MAY 18...	5	--	--	--	--	1.7	--	--	.04	--	6.8
JUN 15...	2	--	--	--	--	1.3	--	--	.04	--	5.2
JUL 27...	10	1.5	.01	.53	.67	1.2	--	2.7	.05	.04	5.0
AUG 08...	3	1.5	.01	.61	.59	1.2	--	2.7	.05	.03	5.3
SEP 29...	8	1.4	.01	.45	.29	.74	360	2.1	.04	.01	7.6

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)
SEP 29...	1040	20	<10	30	<10	<10	830	15	0	.0	<10	0

DATE	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
SEP 29...	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01411880 MAURICE RIVER AT SHARP STREET AT MILLVILLE, NJ

LOCATION.--Lat 39°24'01", long 75°03'15", Cumberland County, Hydrologic Unit 02040206, at bridge on Sharp Street, 200 ft (61 m) downstream from Union Lake, and 0.9 mi (1.4 km) northwest of Millville.

DRAINAGE AREA.--218 mi² (565 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1973 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 17...	1015	97	7.5	5.0	2	12.2	1.7	250	13	46	<2	21
MAR 02...	0940	84	6.8	6.0	5	12.4	1.7	100	49	34	20	16
APR 06...	1035	84	6.8	11.5	3	11.2	1.3	130	<2	B13	5	26
MAY 18...	1025	92	7.9	21.0	2	9.0	3.4	69	13	22	<2	36
JUN 16...	1030	99	6.6	21.5	1	9.2	2.1	--	8	25	2	20
JUL 27...	1000	98	7.2	24.0	2	8.0	2.7	--	110	--	2	19
AUG 08...	1225	86	7.6	28.5	6	3.1	3.2	--	<2	--	49	19
SEP 29...	0930	93	7.3	20.0	2	9.0	2.6	--	<2	--	17	20

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
NOV 17...	12	4.3	2.5	6.7	2.2	11	0	9	.6	15	9.4	57
MAR 02...	8	3.2	1.9	5.9	2.1	10	0	8	2.5	9.4	9.5	58
APR 06...	20	6.1	2.6	7.2	2.0	7	0	6	1.8	12	9.1	69
MAY 18...	27	5.2	5.6	7.8	2.1	11	0	9	.2	11	9.9	59
JUN 16...	9	4.3	2.2	8.0	2.0	13	0	11	5.2	9.5	10	56
JUL 27...	7	3.7	2.3	8.8	2.1	15	0	12	1.5	8.6	11	120
AUG 08...	5	3.8	2.3	8.8	2.4	17	0	14	.7	7.4	11	48
SEP 29...	5	4.0	2.4	8.2	2.3	18	0	15	1.4	9.8	11	62

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 17...	7	--	--	--	--	1.4	--	--	.03	--	4.6
MAR 02...	8	--	--	--	--	1.4	--	--	.05	--	5.6
APR 06...	7	--	--	--	--	1.4	--	--	.95	--	--
MAY 18...	3	--	--	--	--	1.4	--	--	.02	--	6.3
JUN 16...	0	--	--	--	--	1.1	--	--	.05	--	5.7
JUL 27...	11	.65	.01	.05	.66	.71	--	1.4	.04	.02	6.2
AUG 08...	4	.47	.01	.02	1.4	1.4	--	1.9	.04	.02	4.0
SEP 29...	2	.77	.01	.01	.54	.55	570	1.3	.03	.02	8.0

01411880 MAURICE RIVER AT SHARP STREET AT MILLVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
SEP 29...	0930	15	<10	10	<10	<10	1700	<10	20	.1	<10	10

DATE	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 29...	0	.0	0	.0	.0	1.5	.0	.0	.0	.0	.0	0

01412020 MANANTICO CREEK NEAR PORT ELIZABETH, NJ

LOCATION.--Lat 39°21'10", long 75°00'06", Cumberland County, Hydrologic Unit 02040206, at bridge on State Route 55, 2.7 mi (4.3 km) northwest of Port Elizabeth, 2.0 mi (3.2 km) southeast of Millville, and 1.4 mi (2.3 km) upstream from mouth.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 06...	1120	5400	7.1	17.0	4	6.0	2.4	B320	33	--	240	500
NOV 18...	0955	336	7.1	4.5	7	11.0	1.9	1400	79	B1800	220	45
MAR 02...	1105	82	6.2	7.0	6	11.2	1.6	B12	<2	B20	<2	18
APR 07...	0945	82	6.0	11.0	2	11.1	.6	B17	--	120	--	27
MAY 19...	0955	205	6.3	21.5	5	8.6	2.7	410	350	500	49	52
JUN 16...	1145	1690	6.5	22.5	2	9.8	4.2	B120	14	350	14	150
JUL 27...	1030	3320	6.5	23.5	1	6.1	3.9	--	130	--	130	330
AUG 10...	1030	2450	6.4	26.0	1	5.1	4.2	--	140	--	1600	220

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 06...	480	37	98	880	36	29	0	24	3.7	--	240	1700
NOV 18...	33	6.8	6.7	39	3.4	15	0	12	1.9	--	20	71
MAR 02...	12	4.3	1.8	3.7	2.7	7	0	6	7.1	--	13	7.7
APR 07...	26	7.2	2.2	2.0	1.8	1	0	1	1.6	--	12	7.9
MAY 19...	45	5.2	9.5	34	3.3	9	0	7	7.2	.0	16	61
JUN 16...	140	14	29	260	13	17	0	14	8.6	--	65	450
JUL 27...	310	25	65	540	21	24	0	20	12	--	130	980
AUG 10...	210	18	43	300	18	15	0	12	9.6	--	89	670

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	--	3120	10	--	--	--	--	1.4	--	.08	--	--
NOV 18...	--	165	12	--	--	--	--	1.7	--	.07	--	4.3
MAR 02...	--	56	8	--	--	.02	.37	.39	2.6	.05	--	3.2
APR 07...	--	56	9	--	--	.03	.53	.56	2.4	.03	--	5.0
MAY 19...	5.4	157	21	--	--	--	--	1.4	--	.08	--	4.2
JUN 16...	--	877	11	--	--	--	--	1.4	--	.04	--	5.4
JUL 27...	--	2000	23	.14	.01	.11	.37	.48	.63	.07	.01	4.9
AUG 10...	--	1400	26	.14	.00	.06	.69	.75	.89	.07	.02	5.9

01412020 MANANTICO CREEK NEAR PORT ELIZABETH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 19...	0955	10	1	30	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 19...	300	13	60	.0	6	0	30	1

01412100 MANUMUSKIN RIVER NEAR MANUMUSKIN, NJ

LOCATION.--Lat 39°20'57", long 74°57'31", Cumberland County, Hydrologic Unit 02040206, at bridge on light-duty road, 1.1 mi (1.8 km) north of Manumuskin, 2.9 mi (4.7 km) northeast of Port Elizabeth, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--32.1 mi² (83.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 06...	1220	48	4.4	15.5	2	8.7	.9	24	5	--	<2	6
NOV 10...	1045	39	4.5	5.5	1	11.0	.7	66	8	54	<2	5
MAR 01...	1240	53	4.4	6.5	1	11.3	1.5	86	<20	76	2	4
APR 07...	1035	58	4.0	9.0	1	10.5	.6	22	--	100	--	35
MAY 19...	1055	34	4.6	20.0	2	8.4	.4	41	17	810	49	7
JUN 16...	1245	48	4.4	18.5	1	8.6	.6	29	8	110	<2	6
JUL 27...	1110	35	4.4	17.5	1	8.0	1.6	--	33	--	2	4
AUG 10...	1110	32	4.4	20.5	0	7.5	.6	--	49	--	540	5

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 06...	6	.8	.9	2.8	.7	0	0	0	.0	6.5	4.2
NOV 10...	5	1.1	.6	2.4	.6	0	0	0	.0	6.1	3.9
MAR 01...	4	1.0	.4	2.5	1.1	0	0	0	.0	10	3.7
APR 07...	35	11	1.8	2.2	.9	0	0	0	.0	10	3.6
MAY 19...	6	.9	1.1	2.3	.6	1	0	1	40	5.3	4.0
JUN 16...	6	1.5	.5	2.4	.5	0	0	0	.0	5.8	4.0
JUL 27...	4	.9	.5	2.5	.7	0	0	0	.0	4.9	4.2
AUG 10...	5	1.0	.5	2.3	1.0	0	0	0	.0	5.0	3.8

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	36	1	--	--	--	--	1.1	--	.01	--	3.1
NOV 10...	26	1	--	--	--	--	1.3	--	.01	--	1.6
MAR 01...	36	1	--	--	--	--	1.1	--	.02	--	4.8
APR 07...	39	0	--	--	--	--	1.1	--	--	--	7.4
MAY 19...	29	13	--	--	--	--	1.0	--	.00	--	4.7
JUN 16...	28	0	--	--	--	--	1.4	--	.01	--	5.1
JUL 27...	35	0	.06	.00	.02	.02	.04	.10	.01	.01	7.1
AUG 10...	28	3	.10	.00	.03	.48	.51	.61	.01	.00	4.5

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ

LOCATION.--Lat 39°18'19", long 75°22'37", Cumberland County, Hydrologic Unit 02040204, water-quality recorder on light ship in bay opposite Bombay Hook Island, Del., and 3.0 mi (4.8 km) southwest of mouth of Cohansey River, in N.J.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to current year.
WATER TEMPERATURES: February 1970 to current year.

REMARKS.--Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 52,800 micromhos Feb. 10, 1970; minimum, 570 micromhos Dec. 17, 1972.
WATER TEMPERATURES: Maximum, 30.0°C Aug. 1, 1970; minimum, 0.0°C several days during winter months.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	30600	24500	27800	18100	11700	15500	22400	14600	18800	19100	14100	17000
2	31100	26500	28700	19700	11700	16200	21900	16000	18500	22600	15200	19000
3	29800	22200	27700	19200	13100	16300	22000	14200	18200	24600	17700	21400
4	30600	25100	27900	20400	12500	17200	21400	14600	18200	25400	20400	22900
5	30000	26400	28600	20000	13700	16900	20500	14300	18400	26200	20700	23800
6	29600	24500	28000	15900	11600	14300	22600	15100	19300	26400	21400	24300
7	28700	23300	26900	16400	9360	13400	23800	18000	20600	26700	20900	24100
8	28700	23100	26600	18000	11600	14500	21900	16100	19200	25600	18700	22200
9	30600	23300	26800	19000	11500	15800	19100	11800	16500	26400	20900	24000
10	25900	16200	21800	17600	11100	14600	19200	12600	16600	27600	22400	25300
11	24200	15600	21100	17500	11500	14900	17600	11600	15600	22700	15100	20200
12	24900	15000	21100	19200	13000	15800	19300	11800	16500	19300	9850	16700
13	24600	14100	20400	18500	11000	15000	19000	12300	15200	11300	9850	10500
14	22600	11900	17800	19300	12000	15600	18900	10800	15100	11000	9220	10300
15	23000	12000	16900	20900	13700	17200	18100	11800	15500	13200	9530	11200
16	20900	11400	16900	22100	16000	18900	20300	13100	17300	12600	11700	12200
17	23800	15900	19300	22600	16700	20200	20900	14100	18600	12000	10100	11100
18	23100	16900	20700	22700	17400	20400	20800	15300	18100	11200	10000	10600
19	26000	18100	22800	23600	16900	20800	21500	13200	17800	11000	9880	10400
20	27200	21600	23900	23800	16400	20200	22000	14400	18400	10500	9390	10000
21	24000	17800	21500	23300	16100	19500	19300	12700	16200	10300	9460	9910
22	21900	14100	18400	22100	15000	17800	19300	10400	15000	10600	9630	10000
23	22400	13500	17500	21000	14000	16500	20400	12100	16800	10500	9120	9850
24	22100	12900	17100	21300	12500	16600	22000	13100	17300	10100	9060	9570
25	22200	13600	18000	22600	14000	17700	20500	14000	17800	10900	9390	9990
26	23000	13700	18300	21900	14200	18000	20400	14400	18000	12600	10100	11300
27	24300	13400	18700	21600	14300	18000	21400	14700	18100	13500	11900	12600
28	21600	12400	17600	21200	14000	18100	21900	14700	19100	13500	4080	11000
29	20400	11800	16200	21300	16000	18400	23800	18100	20500	5630	3790	5280
30	21500	10200	16600	20900	14500	17600	21600	15700	18600	7240	5210	5840
31	21900	13100	17500	---	---	---	19900	13200	17700	6700	5610	6110
MONTH	31100	10200	21600	23800	9360	17100	23800	10400	17700	27600	3790	14500

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6320	5630	6000	18900	14600	16500	22000	12700	19200			
2	8800	5890	6930	20500	11900	15800	21900	13600	18700			
3	7640	5640	6580	14400	13900	---	20300	11700	16400			
4	8960	5760	7200	---	---	---	19100	11800	15800			
5	7990	1140	5480	---	---	---	18700	11900	15700			
6	5850	2690	5190	---	---	---	---	---	---			
7	5830	4860	5350	---	---	---	---	---	---			
8	6040	1420	4790	---	---	---	---	---	---			
9	5000	1690	3590	---	---	---	---	---	---			
10	4790	2700	3690	---	---	---	---	---	---			
11	4440	2690	3710	---	---	---	---	---	---			
12	20300	4210	10400	---	---	---	---	---	---			
13	20500	18400	19600	---	---	---	---	---	---			
14	20500	17900	19300	---	---	---	---	---	---			
15	20500	17600	19000	---	---	---	---	---	---			
16	21400	18200	19500	---	---	---	---	---	---			
17	21500	13600	19400	---	---	---	---	---	---			
18	22400	16600	19400	---	---	---	---	---	---			
19	19900	14600	17500	---	---	---	---	---	---			
20	21900	14500	19200	---	---	---	---	---	---			
21	18900	16100	17700	---	---	---	---	---	---			
22	19600	11800	16100	---	---	---	---	---	---			
23	14000	6020	9570	---	---	---	---	---	---			
24	21900	11600	16700	---	---	---	---	---	---			
25	22600	9360	17200	---	---	---	---	---	---			
26	20000	12900	17200	---	---	---	---	---	---			
27	17300	12100	14800	---	---	---	---	---	---			
28	19100	12100	16100	20100	13500	16600	---	---	---			
29	---	---	---	23300	14300	19800	---	---	---			
30	---	---	---	22100	14400	18800	---	---	---			
31	---	---	---	22100	15800	19400	---	---	---			
MONTH	22600	1140	12400	23300	11900	17800	22000	11700	17200			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	27600	20900	24100	---	---	---	28700	24000	26400
2	---	---	---	27600	21300	24500	---	---	---	27400	21800	25300
3	---	---	---	28900	22000	25400	---	---	---	26900	21000	24700
4	---	---	---	---	---	---	---	---	---	28500	22000	25500
5	---	---	---	---	---	---	---	---	---	28700	21600	25800
6	---	---	---	---	---	---	---	---	---	28300	22500	25400
7	---	---	---	26700	21600	24900	---	---	---	---	---	---
8	---	---	---	26000	19500	23400	28300	22000	25700	---	---	---
9	---	---	---	23800	18400	21800	29000	21600	25700	---	---	---
10	---	---	---	23900	18600	21500	29000	22100	26200	---	---	---
11	---	---	---	25200	20000	22100	29000	22000	26700	---	---	---
12	---	---	---	25700	19700	22300	29400	24900	27100	---	---	---
13	---	---	---	23800	19800	22400	29600	24900	27500	---	---	---
14	---	---	---	25400	19600	22300	28900	25200	27400	---	---	---
15	---	---	---	25700	19700	22800	28300	25100	27000	---	---	---
16	---	---	---	24900	19500	22600	---	---	---	---	---	---
17	---	---	---	24000	18800	21500	---	---	---	---	---	---
18	---	---	---	23900	18600	21300	---	---	---	---	---	---
19	---	---	---	24200	19100	21600	---	---	---	---	---	---
20	---	---	---	24500	19200	21700	---	---	---	---	---	---
21	25400	20600	23900	24000	19400	21900	---	---	---	---	---	---
22	26200	21000	24300	25700	21000	23000	---	---	---	---	---	---
23	26900	22500	24700	29200	22700	25800	26000	15500	19300	---	---	---
24	27200	21800	25100	28700	21900	25500	28300	15600	23400	---	---	---
25	26000	22200	24600	27100	20900	23800	30900	22400	26800	---	---	---
26	27200	22600	25100	27600	23100	25300	30900	21900	27400	---	---	---
27	28300	21900	25500	---	---	---	29800	24600	27000	25900	22200	24600
28	27900	23100	25300	---	---	---	29000	23600	26300	26500	21400	24100
29	27600	21500	24500	---	---	---	28300	22800	25800	26400	18900	23500
30	28100	21800	24600	---	---	---	28700	23200	25800	27200	19100	23500
31	---	---	---	---	---	---	29000	23300	26300	---	---	---
MONTH	28300	20600	24800	29200	18400	23100	30900	15500	26000	28700	18900	24900
YEAR	31100	1140	18900									

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	19.5	20.0	11.0	10.0	11.0	5.0	4.5	5.0	0.0	0.0	0.0
2	19.5	19.5	19.5	10.5	10.0	10.0	4.5	4.0	4.5	0.0	0.0	0.0
3	19.5	19.0	19.0	10.5	10.0	10.0	4.0	3.0	3.5	0.0	0.0	0.0
4	19.5	18.5	19.0	11.0	10.0	10.5	3.5	2.5	3.0	0.0	0.0	0.0
5	19.0	18.5	19.0	10.5	10.0	10.0	3.0	3.0	3.0	0.0	0.0	0.0
6	19.0	18.5	18.5	10.0	9.5	9.5	3.5	2.5	3.0	0.0	0.0	0.0
7	19.0	18.5	19.0	9.5	9.5	9.5	3.5	3.0	3.5	0.0	0.0	0.0
8	19.5	19.0	19.0	9.5	8.5	9.0	3.5	2.5	3.0	0.0	0.0	0.0
9	19.5	19.0	19.5	8.5	8.0	8.0	2.5	2.0	2.5	0.0	0.0	0.0
10	19.0	18.0	18.5	8.0	8.0	8.0	2.5	2.0	2.5	0.0	0.0	0.0
11	18.5	17.5	18.0	8.0	7.5	8.0	2.5	2.5	2.5	0.0	0.0	0.0
12	18.0	17.0	17.5	8.0	7.5	7.5	3.0	2.5	2.5	0.0	0.0	0.0
13	17.5	17.0	17.5	7.5	7.0	7.5	3.0	2.0	2.5	0.0	0.0	0.0
14	17.5	16.5	17.0	7.5	6.5	7.5	2.5	1.0	2.0	0.0	0.0	0.0
15	17.0	16.0	16.5	7.0	6.5	7.0	2.5	2.0	2.5	0.0	0.0	0.0
16	17.0	16.0	16.5	7.5	6.5	7.0	2.5	2.0	2.5	0.0	0.0	0.0
17	16.5	15.0	15.5	7.5	7.0	7.5	2.5	2.0	2.5	0.0	0.0	0.0
18	15.5	14.5	15.0	7.5	7.0	7.5	2.5	2.0	2.5	0.0	0.0	0.0
19	15.0	14.5	15.0	7.5	7.0	7.5	2.5	2.0	2.5	0.0	0.0	0.0
20	15.0	14.5	15.0	7.5	7.0	7.5	2.5	2.5	2.5	0.0	0.0	0.0
21	15.0	14.0	14.5	7.5	7.0	7.0	2.5	2.0	2.5	0.0	0.0	0.0
22	14.0	13.5	14.0	7.0	6.5	6.5	2.0	1.0	1.5	0.0	0.0	0.0
23	13.5	13.0	13.5	6.5	6.0	6.0	1.5	1.0	1.5	0.0	0.0	0.0
24	13.0	13.0	13.0	6.0	5.0	5.5	1.5	0.5	1.0	0.0	0.0	0.0
25	13.0	13.0	13.0	5.5	5.0	5.5	1.0	0.5	1.0	0.0	0.0	0.0
26	13.0	12.0	12.5	6.0	5.0	5.5	1.0	0.5	1.0	0.0	0.0	0.0
27	12.5	11.5	12.0	6.0	6.0	6.0	1.0	0.5	1.0	0.0	0.0	0.0
28	11.5	11.0	11.5	6.0	6.0	6.0	1.0	0.5	1.0	0.0	0.0	0.0
29	11.5	10.5	11.0	6.0	5.5	6.0	1.5	1.0	1.0	0.0	0.0	0.0
30	11.0	10.5	11.0	5.5	4.5	5.0	1.0	0.0	0.5	0.0	0.0	0.0
31	11.5	11.0	11.0	---	---	---	0.5	0.0	0.0	0.0	0.0	0.0
MONTH	20.0	10.5	16.0	11.0	4.5	7.5	5.0	0.0	2.5	0.0	0.0	0.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	---	---	---	10.0	8.5	9.0			
2	0.0	0.0	0.0	---	---	---	9.5	9.0	9.0			
3	0.0	0.0	0.0	---	---	---	10.5	9.0	10.0			
4	0.0	0.0	0.0	---	---	---	10.0	9.5	10.0			
5	0.0	0.0	0.0	---	---	---	10.0	9.5	10.0			
6	0.0	0.0	0.0	---	---	---	10.0	9.5	10.0			
7	0.0	0.0	0.0	---	---	---	10.0	9.5	9.5			
8	0.0	0.0	0.0	---	---	---	9.5	9.0	9.5			
9	0.0	0.0	0.0	---	---	---	9.5	8.5	9.0			
10	---	---	---	---	---	---	10.0	8.5	9.5			
11	---	---	---	---	---	---	10.5	9.5	10.0			
12	---	---	---	---	---	---	11.0	9.5	10.0			
13	---	---	---	---	---	---	---	---	---			
14	---	---	---	---	---	---	---	---	---			
15	---	---	---	---	---	---	---	---	---			
16	---	---	---	---	---	---	---	---	---			
17	---	---	---	---	---	---	---	---	---			
18	---	---	---	---	---	---	---	---	---			
19	---	---	---	---	---	---	---	---	---			
20	---	---	---	---	---	---	---	---	---			
21	---	---	---	---	---	---	---	---	---			
22	---	---	---	---	---	---	---	---	---			
23	---	---	---	---	---	---	---	---	---			
24	---	---	---	---	---	---	---	---	---			
25	---	---	---	---	---	---	---	---	---			
26	---	---	---	---	---	---	---	---	---			
27	---	---	---	---	---	---	---	---	---			
28	---	---	---	8.0	7.0	7.5	---	---	---			
29	---	---	---	9.0	7.0	7.5	---	---	---			
30	---	---	---	9.5	7.5	8.5	---	---	---			
31	---	---	---	9.5	8.0	8.5	---	---	---			
MONTH	0.0	0.0	0.0	9.5	7.0	8.0	11.0	8.5	9.5			

01412350 DELAWARE BAY AT SHIP JOHN SHOAL LIGHTHOUSE, NJ--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	25.5	24.5	25.0	---	---	---	26.0	25.5	26.0
2	---	---	---	25.5	25.0	25.5	---	---	---	26.5	26.0	26.0
3	---	---	---	26.0	25.0	25.5	---	---	---	26.5	26.0	26.5
4	---	---	---	---	---	---	---	---	---	27.0	26.0	26.5
5	---	---	---	---	---	---	---	---	---	26.5	23.0	26.5
6	---	---	---	---	---	---	---	---	---	26.5	21.5	26.0
7	---	---	---	26.5	26.0	26.0	---	---	---	---	---	---
8	---	---	---	27.0	26.0	26.5	28.0	27.0	27.5	---	---	---
9	---	---	---	27.0	26.5	26.5	28.5	26.5	27.5	---	---	---
10	---	---	---	27.5	26.5	26.5	28.0	27.0	27.5	---	---	---
11	---	---	---	26.5	26.5	26.5	29.0	27.0	27.5	---	---	---
12	---	---	---	26.5	26.0	26.5	28.0	27.0	27.5	---	---	---
13	---	---	---	28.5	26.5	26.5	27.5	27.0	27.5	---	---	---
14	---	---	---	28.0	26.5	27.0	27.5	27.0	27.0	---	---	---
15	---	---	---	28.5	26.5	27.5	27.5	27.0	27.0	---	---	---
16	---	---	---	28.5	27.0	27.5	---	---	---	---	---	---
17	---	---	---	28.5	27.0	28.0	---	---	---	---	---	---
18	---	---	---	28.5	28.0	28.0	---	---	---	---	---	---
19	---	---	---	29.0	28.0	28.5	---	---	---	---	---	---
20	---	---	---	29.0	28.5	28.5	---	---	---	---	---	---
21	23.0	22.5	23.0	30.0	28.5	29.0	---	---	---	---	---	---
22	23.0	22.0	22.5	28.5	28.0	28.5	---	---	---	---	---	---
23	23.0	22.0	22.5	29.0	27.5	28.5	26.0	25.0	25.0	---	---	---
24	23.5	22.0	22.5	28.5	28.0	28.5	26.0	25.0	25.0	---	---	---
25	23.0	22.5	23.0	28.0	27.0	27.5	25.5	24.5	25.0	---	---	---
26	24.0	22.5	23.0	27.0	26.5	27.0	25.0	24.5	25.0	---	---	---
27	25.0	23.5	23.5	---	---	---	25.0	24.5	24.5	22.5	22.0	22.0
28	24.5	23.5	24.0	---	---	---	25.0	24.5	25.0	22.5	21.5	22.0
29	24.5	24.0	24.5	---	---	---	25.5	24.5	25.0	21.5	21.5	21.5
30	25.0	24.5	24.5	---	---	---	26.0	25.0	25.5	21.5	21.0	21.5
31	---	---	---	---	---	---	26.0	25.0	26.0	---	---	---
MONTH	25.0	22.0	23.5	30.0	24.5	27.0	29.0	24.5	26.0	27.0	21.0	24.5
YEAR	30.0	0.0	12.0									

01412800 COHANSEY RIVER AT SEELEY, NJ

LOCATION.--Lat 39°28'21", long 75°15'21", Cumberland County, Hydrologic Unit 02040206, at bridge on Silver Lake Road, 2.6 mi (4.2 km) east of Shiloh, 1.5 mi (2.4 km) south of Hands Pond, 4.1 mi (6.6 km) north of Bridgeton, and 22.5 mi (36.2 km) upstream from mouth.

DRAINAGE AREA.--28.0 mi² (72.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT 05...	1030	238	7.3	16.0	2	7.9	.9	270	46	--
NOV 16...	1050	246	7.3	6.0	4	11.2	1.6	B160	49	560
MAR 03...	0840	232	6.9	5.5	55	11.0	2.7	B800	70	B1300
APR 05...	1015	189	6.6	12.0	7	9.8	2.3	210	240	1200
MAY 17...	1010	234	6.7	17.5	2	9.2	1.8	380	540	520
JUN 14...	1240	222	6.6	21.5	3	10.0	1.1	200	240	--
JUL 27...	0945	242	7.7	19.0	2	8.1	2.0	--	94	--
AUG 09...	1150	227	6.6	24.0	2	8.6	1.0	--	350	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT 05...	800	53	36	9.8	7.0	18	4.6	21	0	17
NOV 16...	90	56	8	11	7.0	18	4.5	59	0	48
MAR 03...	280	49	33	9.1	6.3	17	5.1	20	0	16
APR 05...	350	58	45	13	6.1	13	4.6	16	0	13
MAY 17...	40	55	39	11	6.6	17	3.9	20	0	16
JUN 14...	5	51	32	10	6.3	18	4.3	23	0	19
JUL 27...	540	52	26	10	6.6	20	4.2	32	0	26
AUG 09...	170	53	36	10	6.8	17	4.6	21	0	17

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 05...	1.7	.1	20	32	7.5	136	6	--	--
NOV 16...	4.7	--	22	31	--	137	6	--	--
MAR 03...	4.0	--	24	30	--	143	37	--	--
APR 05...	6.4	--	21	23	--	109	9	--	--
MAY 17...	6.4	--	21	30	--	138	7	--	--
JUN 14...	9.2	--	22	30	--	141	6	--	--
JUL 27...	[illegible].0	--	19	31	--	156	7	3.6	.02
AUG 09...	8.4	--	18	33	--	158	0	3.5	.02

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 05...	--	--	1.3	200	--	.05	--	1.6	12
NOV 16...	--	--	2.4	--	--	.05	--	2.2	--
MAR 03...	--	--	2.2	--	--	.21	--	5.1	--
APR 05...	--	--	2.0	--	--	.11	--	--	--
MAY 17...	--	--	1.1	--	--	.03	--	5.8	--
JUN 14...	--	--	1.4	--	--	.01	--	6.0	--
JUL 27...	.06	.24	.30	--	3.9	.05	.00	2.1	--
AUG 09...	.03	.54	.57	--	4.1	.04	.01	4.8	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CH6) (UG/L)
OCT 05...	1030	90	80	10	1	5	30	1	0	10	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 05...	1	0	10	10	460	90	4700	3	10	60

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 05...	80	<.5	.1	7	0	0	10	20	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 05...	8	52	76	34	2.7	.5	.0	.0	.0	0

01413014 COHANSEY RIVER AT OUTLET OF SUNSET LAKE AT BRIDGETON, NJ

LOCATION.--Lat 39°26'44", long 75°14'16", Cumberland County, Hydrologic Unit 02040206, at bridge on Park Drive, at outlet of Sunset Lake, and 20.7 mi (32.3 km) upstream from mouth.

DRAINAGE AREA.--45.7 mi² (118.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	1200	208	7.4	16.5	3	9.9	.7	180	33	--	230	49
NOV 16...	1215	194	6.4	7.0	9	11.2	2.5	B200	<20	B270	170	45
MAR 03...	0945	141	6.8	6.5	40	9.4	2.0	B8	2	42	2	31
APR 05...	1130	172	6.7	11.0	5	9.4	1.7	B72	350	300	79	46
MAY 17...	1105	207	6.9	20.0	4	8.8	2.5	B6	<2	510	5	84
JUN 14...	1120	199	6.6	22.0	2	4.4	3.2	B17	50	160	<2	48
JUL 27...	1050	204	7.9	24.0	3	8.5	5.7	--	13	--	33	47
AUG 09...	1100	206	6.6	28.5	6	1.0	5.8	--	33	--	12	50

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 05...	33	9.5	6.2	14	4.2	20	0	16	1.3	18	27
NOV 16...	36	8.1	6.1	14	4.0	11	0	9	7.0	20	25
MAR 03...	19	5.7	4.1	9.0	3.9	15	0	12	3.8	17	15
APR 05...	34	8.9	5.8	11	4.1	15	0	12	4.8	19	20
MAY 17...	66	19	8.8	13	3.8	21	0	17	4.2	21	24
JUN 14...	28	9.5	6.0	13	3.7	24	0	20	9.6	20	24
JUL 27...	19	9.2	5.8	15	3.7	34	0	28	.7	18	26
AUG 09...	19	9.8	6.1	14	4.0	38	0	31	15	16	26

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	118	14	--	--	--	--	1.5	--	.04	--	3.6
NOV 16...	147	433	--	--	--	--	11	--	.28	--	--
MAR 03...	111	23	--	--	--	--	1.1	--	.14	--	3.3
APR 05...	101	0	--	--	--	--	1.8	--	.00	--	--
MAY 17...	102	19	--	--	--	--	1.4	--	.03	--	6.0
JUN 14...	107	29	--	--	--	--	1.3	--	.02	--	5.1
JUL 27...	131	28	1.3	.02	.18	.74	.92	2.2	.10	.01	5.0
AUG 09...	129	19	.99	.01	.31	1.1	1.4	2.4	.13	.01	5.0

01413015 COHANSEY RIVER AT BRIDGETON, NJ

LOCATION.--Lat 39°25'54", long 75°14'11", Cumberland County, Hydrologic Unit 02040206, at bridge on Washington Street, 1.3 mi (2.1 km) downstream from Sunset Lake, and 18.6 mi (29.9 km) upstream from mouth.

DRAINAGE AREA.--47.3 mi² (122.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	1300	2840	7.4	17.0	7	6.1	3.4	1800	170	--	20	300
NOV 16...	1135	216	6.7	6.0	6	10.0	1.8	B300	50	2700	330	54
MAR 03...	1120	190	6.7	7.0	50	9.7	3.5	80	23	300	350	45
APR 05...	1240	326	6.5	12.5	15	6.0	4.7	310	220	B1800	540	63
MAY 17...	1200	646	6.7	20.5	15	5.1	5.3	920	940	610	540	84
JUN 14...	1010	1110	7.1	21.5	3	3.0	4.7	470	490	2100	34	130
JUL 27...	1145	1600	7.3	23.0	2	4.7	3.9	--	490	--	46	170
AUG 09...	1015	1840	6.5	27.0	1	3.4	3.7	--	1600	--	240	190

DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 05...	270	20	58	440	20	41	0	34	2.6	--	120	800
NOV 16...	33	11	6.4	15	4.0	26	0	21	8.3	--	20	25
MAR 03...	29	7.4	6.4	14	4.9	20	0	16	6.4	--	23	20
APR 05...	43	13	7.5	36	5.0	24	0	20	12	--	28	57
MAY 17...	54	12	13	80	6.0	37	0	30	12	.0	38	140
JUN 14...	99	15	22	160	11	38	0	31	4.8	--	56	290
JUL 27...	130	20	30	260	12	51	0	42	4.1	--	66	420
AUG 09...	160	19	34	280	14	41	0	34	21	--	74	97

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	--	2140	22	--	--	--	--	1.7	--	.17	--	5.7
NOV 16...	--	114	16	--	--	--	--	2.1	--	.07	--	3.7
MAR 03...	--	126	45	--	--	.44	.96	1.4	4.3	.27	--	4.0
APR 05...	--	186	20	--	--	.39	1.0	1.4	4.0	.29	--	--
MAY 17...	6.2	348	7	--	--	--	--	2.2	--	.17	--	7.1
JUN 14...	--	630	10	--	--	--	--	1.4	--	.15	--	5.2
JUL 27...	--	904	16	.81	.05	.66	.94	1.6	2.5	.19	.04	7.2
AUG 09...	--	1080	10	.89	.03	.50	1.0	1.5	2.4	.16	.04	4.7

01413015 COHANSEY RIVER AT BRIDGETON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 17...	1200	60	1	20	0	0	0	12

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 17...	280	10	100	.0	5	0	30	4

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, PA, Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge on U.S. Highways 6 and 209 at Port Jervis, 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,076 mi² (7,967 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1905 to current year.
WATER TEMPERATURES: Water years 1957 to 1960, 1973, 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: Water years 1957 to 1960, 1971 to 1976.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1904 to current year.
WATER TEMPERATURES: February 1957 to September 1960, January to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960; March 1971 to June 1976.

REVISED DISCHARGE RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD-NY 1971: 1970.

GAGE.--Water-stage recorder. Temperature recorder since January 1973. Datum of gage is 415.35 ft (126.599 m) NGVD. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft (76.2 m) upstream at present datum. Operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Discharge records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoir (see Delaware River Basin, reservoirs in) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Delaware River Basin, reservoirs in). Part of flow from these reservoirs diverted for city of New York municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low-flow in the lower Delaware River Basin, as directed by the Delaware River Master. New York State Water-quality Surveillance Network station 14 0010.

EXTREMES FOR CURRENT YEAR.--
WATER DISCHARGE: Maximum discharge, 77,000 ft³/s (2,180 m³/s) Mar. 14, gage height, 13.82 ft (4.212 m); maximum gage height, 14.35 ft (4.374 m) Feb. 26 (ice jam); minimum discharge, 673 ft³/s (19.1 m³/s) Sept. 14, gage height, 1.65 ft (0.503 m); minimum daily, 800 ft³/s (22.7 m³/s) Feb. 3.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 17, 18; minimum, 0.0°C on many days during winter months.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 233,000 ft³/s (6,600 m³/s) Aug. 19, 1955, (gage height, 23.91 ft or 7.288 m, from flood mark in gage house), from rating curve extended above 89,000 ft³/s (2,520 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 175 ft³/s (4.96 m³/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).
WATER TEMPERATURES: Maximum, 29.5°C July 19, 1959, Aug. 3, 1975; minimum (1957-60, 73, 75-77), 0.0°C on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 760 mg/L June 29, 1973; minimum daily mean, less than 1 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 187,000 tons (170,000 tonnes) June 29, 1973; minimum daily, 1 ton (0.9 tonne) Aug. 29, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, 205,000 ft³/s (5,810 m³/s) Oct. 10, 1903, (gage height, 23.1 ft or 7.04 m, reported by U.S. Weather Bureau), from rating curve extended above 70,000 ft³/s (1,980 m³/s) by velocity-area studies; maximum stage known, 25.5 ft (7.77 m) Mar. 8, 1904 (ice jam).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2360	11700	2320	1800	1600	13000	31600	6680	1150	1820	1820	1710
2	1820	9830	2090	2100	920	9340	23300	6270	1160	1390	2350	1500
3	1730	8570	2420	2500	800	8140	29300	6160	1050	1240	1930	1500
4	2220	8560	2280	2300	960	7860	22900	5220	1290	1430	1730	1300
5	2270	8520	1510	1900	1400	21000	20200	6300	1330	1600	1560	1480
6	2090	7890	2450	1800	2100	20700	20000	10200	1410	1360	1320	1720
7	1640	6910	3530	2500	2200	14400	17300	8550	1360	2120	1550	1880
8	1820	6790	8290	2700	2800	10700	14900	6790	1170	1630	1800	1680
9	10400	6620	9010	2600	2600	8850	13000	6870	1560	1720	2160	1570
10	37400	5800	6960	2000	2200	9200	11500	8170	2710	1190	1720	1620
11	16100	5490	5200	2900	2100	11400	10400	7930	2400	1590	1670	1380
12	9950	5230	4670	2800	2000	13000	9030	7930	1710	1660	1430	1270
13	7660	4590	4500	2900	1900	21100	8140	7930	1230	1810	1250	1580
14	6720	4120	4520	2700	1600	69100	7420	7530	1610	1960	1560	1460
15	6640	4270	3370	2400	2100	44600	6850	6380	1350	2140	1590	1640
16	5150	4080	3200	1500	2900	28900	5420	6230	1390	1340	1680	1940
17	4350	3850	3330	2300	3000	21000	3980	5100	1420	1940	1820	2660
18	4490	3480	2880	3000	2300	16400	4120	4580	1670	1880	1260	4050
19	4110	2960	2440	2700	1980	14600	3900	4870	1770	2700	1630	2700
20	4030	2970	2620	2400	1800	11300	3620	4650	1900	2480	1520	3260
21	18000	2980	2850	2300	1900	9870	2990	3710	2530	2820	1270	9600
22	23700	2910	3670	2300	1700	11100	2610	2880	2020	1820	1530	7590
23	15200	2970	2990	2400	1800	15100	2920	2730	1900	943	1870	5530
24	11500	2720	2020	1800	1800	13500	5490	2570	1910	1550	1860	3720
25	11700	2260	2130	2500	5000	11400	17700	2610	1960	1190	1800	13500
26	13700	2030	1840	2000	11000	9460	16100	2350	1790	1130	1600	28300
27	12800	1880	2350	1800	10000	8310	13900	1490	1330	903	922	30200
28	10400	1780	2900	1800	11000	9540	12200	1250	1920	1530	1210	15600
29	9100	2310	2300	1400	---	12800	9980	1090	1960	1560	1460	10500
30	8070	2730	2100	900	---	29600	8130	1050	1030	1610	1090	8070
31	7720	---	1900	1100	---	38000	---	1060	---	1630	1630	---
TOTAL	274840	146800	104640	68100	83380	543270	358900	157130	49790	51686	50392	170620
MEAN	8866	4893	3375	2197	2978	17520	11960	5069	1660	1667	1626	5687
MAX	37400	11700	9010	3000	11000	69100	31600	10200	2710	2820	2350	30200
MIN	1640	1780	1510	900	800	7860	2610	1050	1050	903	922	1270

CAL YR 1976 TOTAL 2194170 MEAN 5995 MAX 50200 MIN 1340
WTR YR 1977 TOTAL 2059548 MEAN 5643 MAX 69100 MIN 800

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	13.5	14.5	7.5	7.0	7.0	1.5	0.5	1.0	1.0	0.5	0.5
2	15.5	14.5	15.0	7.0	5.5	6.5	1.0	0.5	1.0	0.5	0.0	0.5
3	15.5	15.0	15.0	6.5	6.0	6.5	1.5	0.5	1.0	0.5	0.0	0.5
4	16.0	14.5	15.5	7.5	6.5	7.0	1.0	0.0	0.5	0.5	0.5	0.5
5	16.5	15.0	16.0	7.0	6.0	6.5	1.0	0.0	0.5	0.5	0.0	0.5
6	16.5	15.5	16.0	6.0	5.5	6.0	0.5	0.0	0.5	0.5	0.0	0.5
7	17.0	15.0	16.5	5.5	5.5	5.5	1.5	0.5	1.0	0.5	0.0	0.5
8	17.0	16.5	17.0	5.5	4.5	5.0	0.5	0.5	0.5	0.5	0.5	0.5
9	17.0	14.5	16.5	4.5	3.5	4.0	0.5	0.5	0.5	0.5	0.5	0.5
10	14.5	12.5	13.0	4.5	3.5	4.0	0.5	0.5	0.5	0.5	0.0	0.5
11	12.5	11.0	11.5	4.5	3.5	4.0	1.0	0.0	0.5	0.5	0.5	0.5
12	11.5	10.5	11.0	4.0	3.5	4.0	1.0	0.5	0.5	0.5	0.5	0.5
13	12.0	10.5	11.5	3.5	3.0	3.5	1.0	0.5	0.5	0.5	0.5	0.5
14	12.0	11.0	11.5	3.5	2.5	3.0	1.0	0.5	0.5	0.5	0.5	0.5
15	11.5	10.5	11.0	3.0	2.5	3.0	1.0	0.5	0.5	0.5	0.5	0.5
16	11.5	11.0	11.5	3.5	2.5	3.0	1.0	0.0	0.5	0.5	0.0	0.5
17	11.0	10.0	10.5	3.5	2.5	3.0	1.5	0.0	1.0	1.0	0.5	0.5
18	10.0	9.0	9.5	3.5	2.5	3.0	1.0	0.5	1.0	0.5	0.5	0.5
19	9.5	8.5	9.0	4.0	2.5	3.5	1.0	0.0	0.5	0.5	0.5	0.5
20	9.0	8.5	9.0	4.0	3.0	3.5	1.5	0.0	0.5	0.5	0.5	0.5
21	10.0	9.0	9.5	3.5	3.0	3.5	1.5	0.5	0.5	0.5	0.5	0.5
22	9.5	8.5	9.0	3.5	2.5	3.0	1.0	0.0	0.5	0.5	0.5	0.5
23	8.5	7.5	8.0	3.0	2.5	3.0	1.0	0.0	0.5	0.5	0.5	0.5
24	8.0	8.0	8.0	2.5	2.0	2.5	1.0	0.5	0.5	0.5	0.0	0.5
25	9.0	8.0	8.5	2.5	1.5	2.5	0.5	0.5	0.5	0.5	0.5	0.5
26	9.0	8.5	9.0	3.0	1.5	2.5	0.5	0.0	0.5	0.5	0.5	0.5
27	8.5	6.5	7.5	4.0	3.0	3.5	0.5	0.5	0.5	0.5	0.0	0.5
28	7.0	5.5	6.0	5.0	4.0	4.5	1.0	0.0	0.5	0.5	0.5	0.5
29	6.5	6.0	6.0	5.0	3.5	4.5	1.0	0.5	0.5	0.5	0.5	0.5
30	7.0	6.0	6.5	3.5	1.5	2.5	1.0	0.5	0.5	0.5	0.5	0.5
31	8.0	6.5	7.5	---	---	---	1.0	0.5	0.5	0.5	0.0	0.5
MONTH	17.0	5.5	11.0	7.5	1.5	4.0	1.5	0.0	0.5	1.0	0.0	0.5

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.5	0.5	1.0	0.5	0.5	6.5	5.5	6.0	13.0	11.0	12.0
2	0.5	0.5	0.5	1.5	0.5	1.0	6.0	5.0	5.5	13.5	12.0	13.0
3	0.5	0.5	0.5	2.0	0.5	1.0	7.0	4.5	6.0	14.0	12.0	13.5
4	0.5	0.0	0.5	2.0	1.0	1.5	7.0	5.5	6.5	13.5	12.5	13.0
5	0.5	0.0	0.5	2.0	0.5	1.5	5.5	4.0	5.0	13.5	12.0	12.5
6	0.5	0.5	0.5	1.5	1.0	1.5	5.5	4.5	5.0	14.5	12.5	14.0
7	1.5	0.0	0.5	1.5	0.5	1.0	5.0	4.0	4.5	15.5	14.0	15.0
8	0.5	0.5	0.5	2.5	1.0	2.0	5.5	5.0	5.0	16.0	14.0	15.0
9	0.5	0.5	0.5	4.0	1.5	3.0	5.5	4.5	5.0	14.5	11.0	13.0
10	0.5	0.5	0.5	5.5	3.5	4.5	6.0	4.0	5.0	11.5	10.5	11.0
11	0.5	0.5	0.5	6.0	5.0	5.5	8.0	5.5	6.5	12.0	10.0	11.0
12	0.5	0.5	0.5	6.0	5.5	6.0	10.5	7.5	9.0	13.5	11.0	12.5
13	0.5	0.0	0.5	7.0	5.0	6.0	12.5	10.0	11.0	15.5	13.5	14.5
14	0.5	0.5	0.5	5.5	4.5	4.5	13.0	11.5	12.5	15.0	13.5	14.5
15	0.5	0.0	0.5	5.0	4.5	4.5	12.5	9.5	11.5	15.0	13.0	14.5
16	0.5	0.5	0.5	5.5	4.5	5.0	12.0	10.5	11.5	15.5	13.5	14.5
17	0.5	0.5	0.5	5.0	4.5	5.0	12.5	9.5	12.0	17.5	14.5	16.0
18	0.5	0.5	0.5	4.5	2.0	3.0	13.0	11.0	12.0	18.5	15.5	17.5
19	0.5	0.5	0.5	3.0	1.5	2.5	14.0	11.5	13.0	19.0	17.5	18.5
20	0.5	0.5	0.5	3.0	1.0	2.5	14.0	13.0	13.5	20.5	18.5	19.5
21	0.5	0.5	0.5	4.0	2.5	3.0	16.5	13.5	15.0	21.0	19.0	20.5
22	0.5	0.0	0.5	4.0	3.0	3.5	17.0	15.0	16.0	23.0	20.0	21.5
23	1.0	0.5	0.5	3.0	2.0	2.5	17.0	15.5	16.5	24.0	21.0	22.0
24	2.0	0.5	0.5	3.5	1.5	2.0	15.5	13.0	14.5	24.0	20.0	22.0
25	3.0	0.5	0.5	3.0	1.0	2.0	13.0	10.0	11.5	23.0	20.5	22.0
26	1.0	0.5	0.5	3.5	2.0	3.0	10.5	9.5	9.5	23.0	20.0	22.0
27	1.5	0.5	1.0	5.5	3.0	4.0	10.0	9.0	9.5	23.5	19.5	21.5
28	1.0	0.5	0.5	5.5	5.0	5.0	11.0	10.0	10.5	24.5	21.5	23.0
29	---	---	---	7.0	5.0	6.0	11.0	10.0	10.5	23.5	20.5	21.5
30	---	---	---	7.5	6.0	6.5	12.0	9.5	11.0	22.5	19.5	21.0
31	---	---	---	8.0	6.5	7.5	---	---	---	23.5	20.0	22.0
MONTH	3.0	0.0	0.5	8.0	0.5	3.5	17.0	4.0	9.5	24.5	10.0	17.0

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.5	20.5	21.5	24.5	21.0	22.5	23.0	21.5	22.0	24.0	22.0	23.0
2	23.5	20.0	22.0	24.0	21.0	22.5	24.0	21.0	22.5	25.0	22.5	24.0
3	22.5	20.0	21.0	24.0	21.0	23.0	23.0	21.0	22.0	25.5	23.0	24.0
4	21.5	19.0	20.5	24.5	22.5	24.0	23.5	21.0	22.5	24.5	22.5	23.5
5	22.0	19.5	21.0	25.0	23.0	24.0	24.5	21.5	23.0	24.0	22.5	23.5
6	21.0	17.5	19.5	25.0	22.5	23.5	25.0	23.0	24.5	24.0	22.5	23.0
7	19.5	17.5	18.5	23.5	22.0	22.5	25.5	23.5	25.0	23.5	21.5	22.5
8	18.0	16.5	17.5	23.5	22.0	23.0	26.0	24.0	25.0	23.0	20.5	22.0
9	17.0	15.5	16.0	24.5	22.5	23.5	26.0	24.0	25.0	22.5	20.5	21.5
10	16.5	14.5	15.5	25.0	22.5	24.0	24.5	22.5	23.5	22.5	20.5	21.5
11	17.5	15.0	16.5	24.5	22.5	23.5	25.5	23.0	24.0	21.5	20.0	20.5
12	18.5	16.0	17.5	23.0	21.0	22.0	25.0	23.5	24.5	20.0	18.0	19.5
13	20.0	17.5	19.0	25.5	22.0	24.0	24.5	23.0	23.5	20.0	18.5	19.0
14	20.5	19.0	20.0	26.5	22.5	24.5	23.5	22.5	23.0	20.0	18.5	19.0
15	21.5	19.0	20.5	25.5	22.5	24.0	24.5	22.0	23.5	19.5	18.0	19.0
16	23.0	20.0	21.5	26.5	22.0	24.5	23.0	22.0	22.5	19.5	18.0	18.5
17	22.5	21.0	22.0	28.0	23.5	26.0	22.5	21.0	21.5	20.5	18.0	19.0
18	23.5	21.0	22.5	28.0	24.5	26.5	22.5	20.0	21.5	19.5	18.5	19.0
19	25.0	22.0	23.5	27.0	24.5	26.0	22.0	19.5	21.0	20.5	18.5	19.5
20	25.0	22.5	23.5	26.0	24.0	25.0	22.0	19.5	20.5	20.0	19.0	19.5
21	24.5	21.0	22.0	26.5	24.0	25.0	21.5	19.5	20.5	19.0	17.0	18.0
22	21.0	19.0	20.0	26.5	24.0	25.0	22.0	20.0	21.0	17.0	15.5	16.5
23	22.0	18.5	20.5	25.0	22.5	24.0	22.0	20.0	21.0	17.0	16.0	16.5
24	23.0	20.0	21.5	26.0	23.5	25.0	21.5	20.5	21.0	16.5	15.5	16.0
25	22.0	20.0	21.0	25.5	23.0	24.0	21.5	19.0	20.5	15.5	13.5	14.5
26	23.5	20.0	21.5	23.5	21.5	22.5	22.0	19.0	20.5	14.0	13.0	13.5
27	24.5	21.5	23.0	23.0	20.5	22.0	22.0	20.0	21.0	14.5	13.5	14.0
28	24.0	21.5	22.5	23.0	20.5	22.0	24.0	20.0	22.5	15.5	14.0	15.0
29	23.0	21.0	22.0	23.5	21.0	22.5	25.5	23.0	24.5	15.0	14.5	15.0
30	25.0	20.5	22.5	23.0	21.5	22.0	25.0	23.5	24.0	15.5	14.5	15.0
31	---	---	---	23.0	20.5	22.0	23.5	21.0	22.5	---	---	---
MONTH	25.0	14.5	20.5	28.0	20.5	23.5	26.0	19.0	22.5	25.5	13.0	19.0

DELAWARE RIVER BASIN

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, NY, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: August to October 1903, August 1909 to April 1914 (gage heights and discharge measurements, also twice daily figures of discharge for January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation), and July 1937 to current year. August to October 1903, published as "Navesink River at Godeffroy, NY".

REVISED DISCHARGE RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) NGVD (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Discharge records good except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 9.18 mi² (238 km²) of drainage area controlled by Neversink Reservoir (see Delaware River Basin, reservoirs in). Part of flow diverted for city of New York municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low-flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,020 ft³/s (199 m³/s) Mar. 14, gage height, 8.29 ft (2.527 m); minimum, 92 ft³/s (2.61 m³/s) July 25, gage height, 2.75 ft (0.838 m).

COORECTIONS.--The minimum discharge for the water year 1976 is 114 ft³/s (3.23 m³/s) July 29, superseding the figures published in WDR NJ-76-1.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft³/s (935 m³/s) Aug. 19, 1955 (gage height, 12.49 ft or 3.087 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow; practically no flow several times in July, 1911.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	912	180	150	96	840	1610	443	125	122	99	125
2	300	708	190	140	96	700	1350	408	127	114	149	127
3	540	623	180	140	94	620	2520	396	122	112	135	129
4	822	702	180	140	94	700	1730	350	114	111	125	121
5	510	650	170	130	94	1860	1880	719	109	108	120	103
6	437	653	170	130	94	1590	1980	775	109	108	111	121
7	402	630	500	120	94	1180	2020	639	122	109	112	106
8	384	581	850	120	96	985	1500	552	122	114	121	105
9	1560	525	526	120	96	889	1150	595	140	120	114	98
10	1800	492	450	120	96	955	929	736	390	109	108	98
11	1160	468	430	120	98	1020	886	616	262	106	114	97
12	938	431	400	110	110	1010	702	516	196	108	109	96
13	775	401	350	110	130	2180	623	455	173	112	114	96
14	703	379	300	110	150	5300	558	408	154	109	114	112
15	662	360	270	110	130	2670	497	350	154	111	116	110
16	583	339	260	110	120	1800	443	319	152	116	109	116
17	546	318	240	110	110	1460	402	295	148	143	129	199
18	479	303	230	110	100	1180	378	271	140	152	170	167
19	426	291	220	110	100	1030	350	257	156	133	133	147
20	432	279	200	100	100	879	324	248	135	125	121	162
21	1530	264	200	100	100	767	300	220	129	123	114	192
22	1000	251	190	100	110	1020	280	214	125	116	114	154
23	806	237	180	100	120	1390	285	199	120	112	112	135
24	727	230	180	100	120	1150	767	185	114	100	109	170
25	863	219	170	100	300	955	1250	170	111	100	109	1200
26	1190	212	170	98	900	846	767	162	125	100	108	1460
27	982	214	160	98	840	806	782	152	122	100	105	1200
28	818	214	160	98	920	895	670	145	118	96	103	606
29	722	241	160	98	---	1220	550	138	118	96	102	497
30	641	240	160	98	---	2180	491	133	143	94	102	396
31	839	---	150	96	---	2310	---	129	---	96	121	---
TOTAL	23982	12375	8176	3496	5508	42467	27902	11203	4367	3483	3622	8533
MEAN	774	413	264	113	197	1370	930	361	146	112	117	284
MAX	1800	912	850	150	920	5300	2520	775	390	152	170	1460
MIN	300	212	150	96	94	620	280	129	109	94	99	96

CAL YR 1976 TOTAL 168671 MEAN 461 MAX 3970 MIN 123
WTR YR 1977 TOTAL 155114 MEAN 425 MAX 5300 MIN 94

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

DRAINAGE AREA.--3,480 mi² (9,013 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1936 to September 1939 (gage heights only, published as "at Milford, PA"). Water years 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1956-73, 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1939 to current year.
WATER TEMPERATURES: October 1956 to September 1957.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) NGVD. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Discharge records excellent except those for December, January, and February, which are good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--38 years, 5,912 ft³/s (167.4 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87,500 ft³/s (2,478 m³/s) Mar. 14, gage height, 20.53 ft (6.258 m); minimum daily, 900 ft³/s (25.5 m³/s) Feb. 3.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s (7,080 m³/s) Aug. 19, 1955 (gage height, 35.15 ft or 10.714 m), from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of flood-routing study; minimum, 382 ft³/s (10.8 m³/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m); minimum daily, 412 ft³/s (11.7 m³/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage during period 1903-77, 35.5 ft (10.82 m) Oct. 10, 1903, present datum, from floodmark.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2970	13000	2800	2100	1700	14000	34800	7690	1410	2070	1910	1910
2	2560	11200	2400	2000	1050	10500	26000	7000	1370	1870	2410	1660
3	2120	9760	2500	2400	900	9000	32600	7020	1340	1290	2340	1810
4	3210	9630	2600	2700	1100	8000	26400	5960	1400	1640	1980	1520
5	3210	9700	1700	2500	1600	20000	23300	7080	1570	1610	1880	1630
6	2760	9120	2300	2100	2200	23000	23400	11400	1620	1920	1610	1760
7	2210	8250	4800	2700	2400	17000	20500	9680	1610	2140	1660	2170
8	2300	7810	9000	2900	3000	12600	17300	7810	1480	1870	1860	1900
9	9320	7710	9720	2900	2800	10400	15000	7720	1640	1990	2430	1750
10	39500	6880	7640	2200	2300	10500	13100	9180	3160	1490	2050	1830
11	18400	6490	5900	3100	2300	12700	11800	8890	3000	1560	1850	1420
12	11500	6190	5200	3000	2200	14300	10300	8770	2230	1950	1750	1390
13	8930	5680	5100	3000	2200	21200	9260	8670	1610	2080	1570	1850
14	7900	5030	4800	2900	1750	76100	8420	8210	1840	2160	1680	1610
15	7740	4940	3800	2600	2400	50400	7780	7060	1680	2430	1650	1700
16	6250	4880	3500	1700	3200	32600	6450	6800	1650	1680	2080	2020
17	5300	4820	3700	2500	3200	23900	4810	5750	1700	2040	2100	2610
18	5140	4260	3300	3200	2500	18500	4720	5000	1870	1980	1680	4500
19	5040	3740	2700	2900	2100	16300	4590	5360	1990	3000	1700	2990
20	4630	3620	2800	2700	2000	13000	4340	5070	2010	2790	1930	3530
21	17700	3680	3000	2500	2000	11100	3640	4530	2770	3010	1520	9090
22	26300	3440	3800	2500	1800	12800	3330	3410	2480	2410	1630	8040
23	17100	3580	3500	2500	2000	18100	3410	3110	2190	1220	1950	5900
24	12900	3400	2500	1900	2000	15900	5560	3010	2040	1660	2190	4260
25	12800	3090	2300	2600	6000	13300	19000	3030	2190	1480	1980	12300
26	15300	2480	2200	2200	11000	11200	17500	2730	2040	1370	1950	29000
27	14600	2480	2200	1900	11000	9770	15200	1940	1580	1180	1190	32700
28	11900	2220	3100	2000	12000	10800	13600	1580	2130	1520	1340	17300
29	10400	2600	3200	1500	---	13900	11100	1380	2170	1730	1400	11400
30	9290	3350	2600	1100	---	30800	9240	1310	2030	1760	2230	8780
31	8840	---	2300	1250	---	40700	---	1320	---	1760	1800	---
TOTAL	308120	173030	116960	74050	90700	602370	406450	177470	57800	58660	57300	180330
MEAN	9939	5768	3773	2389	3239	19430	13550	5725	1927	1892	1848	6011
MAX	39500	13000	9720	3200	12000	76100	34800	11400	3160	3010	2430	32700
MIN	2120	2220	1700	1100	900	8000	3330	1310	1340	1180	1190	1390

CAL YR 1976 TOTAL 2460820 MEAN 6724 MAX 56000 MIN 1590
WTR YR 1977 TOTAL 2303240 MEAN 6310 MAX 76100 MIN 900

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 19...	1200	4730	70	8.4	10.0	3	--	1.0	50	8
DEC 13...	1205	4000	65	7.3	1.0	3	14.0	--	20	350
MAR 01...	1215	14000	70	6.4	3.0	15	19.7	2.0	220	40
31...	1230	42000	57	6.4	10.0	16	--	1.0	--	--
APR 20...	1215	12000	63	6.6	12.0	3	12.0	1.0	50	<2
MAY 19...	1145	4480	70	6.7	15.0	2	--	1.0	40	4
JUN 23...	1230	2730	77	8.0	21.0	1	7.5	1.0	50	240
JUL 14...	1145	2360	82	7.1	26.0	1	5.2	<.5	<20	79
AUG 11...	1215	1700	81	7.7	20.0	0	9.7	1.0	<20	27

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 19...	22	6.5	1.4	3.0	1.0	1.6	12	4.6	3.0	47
DEC 13...	24	7.0	1.5	3.0	.8	--	11	4.3	--	44
MAR 01...	16	5.5	.6	3.5	1.7	--	9.6	6.2	--	50
31...	22	6.5	1.3	3.1	1.0	--	7.7	3.5	--	40
APR 20...	52	18	1.8	3.3	1.1	--	9.9	3.5	--	49
MAY 19...	24	7.3	1.3	3.3	.9	.0	12	4.2	.5	46
JUN 23...	17	4.2	1.6	4.7	1.2	--	9.9	5.4	--	51
JUL 14...	23	7.0	1.4	3.8	1.1	--	9.4	6.2	--	41
AUG 11...	24	7.2	1.5	3.4	1.4	--	12	5.2	--	52

DATE	TOTAL NON-FILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 19...	6	--	--	--	--	1.3	--	--	--	6.1
DEC 13...	4	--	--	--	--	1.1	--	.03	--	5.0
MAR 01...	20	--	--	--	--	1.4	--	.17	--	4.6
31...	70	--	--	--	--	1.5	--	.06	--	--
APR 20...	12	--	--	--	--	1.1	--	.02	--	2.0
MAY 19...	2	--	--	--	--	1.4	--	.01	--	6.9
JUN 23...	7	--	--	--	--	1.1	--	.01	--	6.4
JUL 14...	7	.30	.01	.01	.29	.30	.61	.01	.01	3.6
AUG 11...	8	.28	.00	.01	.60	.61	.89	.01	.00	4.7

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT 19...	1200	40	30	10	0	20	0	0	0	100
MAY 19...	1145	--	--	0	1	10	0	0	0	60

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT 19...	140	140	19	60	<.5	20	0	40	--
MAY 19...	--	40	12	30	.0	20	0	60	0

01439830 BIG FLAT BROOK AT TUTTLES CORNER, NJ

LOCATION.--Lat 41°12'00", long 74°48'56", Sussex County, Hydrologic Unit 02040104, at bridge on State Route 521, 0.7 mi (1.1 km) west of its intersection with U. S. Route 206, 1.2 mi (1.9 km) south of Layton, and 2.0 mi (3.2 km) upstream from Little Flat Brook.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 19...	1100	81	8.9	6.0	3	11.6	2.0	<20	<2	31
DEC 13...	1130	68	8.3	.0	2	14.6	--	80	8	20
FEB 24...	1115	94	6.7	3.0	1	14.3	2.0	<20	2	31
MAR 31...	1130	57	7.0	11.5	1	10.2	<.5	--	--	26
APR 28...	1120	57	7.6	10.0	1	8.6	1.0	20	22	33
MAY 19...	1100	81	7.1	14.5	2	9.5	1.0	80	<2	31
JUN 23...	1100	103	7.6	14.0	1	10.8	<.5	--	350	41
JUL 14...	1050	108	7.2	18.0	1	7.2	<.5	<20	350	41
AUG 11...	1100	112	8.0	15.0	0	9.8	1.0	220	220	41

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 19...	7.8	2.7	4.1	1.1	--	13	4.4	--	47	5
DEC 13...	5.5	1.4	2.5	.6	--	12	3.8	--	34	5
FEB 24...	8.3	2.5	4.3	.8	--	13	5.8	--	52	2
MAR 31...	7.6	1.8	3.3	.7	--	11	2.8	--	42	3
APR 28...	9.8	2.0	3.0	.9	--	11	2.7	--	42	7
MAY 19...	8.6	2.3	3.1	.7	.0	11	4.8	3.1	62	1
JUN 23...	11	3.3	4.7	.8	--	10	7.0	--	72	0
JUL 14...	11	3.2	4.0	.8	--	10	6.3	--	61	3
AUG 11...	11	3.3	4.2	1.0	--	9.8	5.8	--	64	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 19...	--	--	--	--	1.4	--	--	--	6.0
DEC 13...	--	--	--	--	1.4	--	.01	--	5.6
FEB 24...	--	--	--	--	.80	--	.01	--	.8
MAR 31...	--	--	--	--	1.4	--	.00	--	--
APR 28...	--	--	--	--	1.4	--	.01	--	4.5
MAY 19...	--	--	--	--	.80	--	.04	--	5.4
JUN 23...	--	--	--	--	1.1	--	.02	--	6.3
JUL 14...	.16	.00	.00	.06	.06	.22	.01	.01	6.1
AUG 11...	.12	.00	.00	.24	.24	.36	.01	.00	4.9

01439830 BIG FLAT BROOK AT TUTTLES CORNER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 19...	1100	0	1	20	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 19...	50	0	30	.0	50	0	30	2

01439960 FLAT BROOK AT WALLPACK CENTER, NJ

LOCATION.--Lat 41°09'25", long 74°52'39", Sussex County, Hydrologic Unit 02040104, at bridge at Wallpack Center, 1.3 mi (2.1 km) southeast of Shapnack Island, and 3.8 mi (6.1 km) northeast of Buck Bar.

DRAINAGE AREA.--51.3 mi² (132.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 19...	1300	142	8.9	7.5	2	11.0	1.0	<20	<2
DEC 13...	1245	109	7.6	3.0	2	13.4	--	40	79
FEB 24...	1230	103	6.9	3.0	2	13.8	1.0	110	<2
MAR 31...	1330	112	7.1	11.5	2	10.4	<.5	<20	<2
APR 28...	1300	123	7.4	10.5	2	8.9	1.0	<20	7
MAY 19...	1300	156	7.5	15.5	2	8.4	1.0	110	130
JUN 23...	1330	241	8.0	18.0	1	10.2	1.0	20	350
JUL 14...	1245	233	8.0	22.0	1	5.0	2.0	80	33
AUG 11...	1310	233	8.5	20.0	0	17.5	<.5	330	350

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 19...	53	15	3.8	3.6	.9	14	6.9	78	4
DEC 13...	45	13	3.0	3.0	.7	15	5.5	79	5
FEB 24...	68	20	4.5	5.6	1.0	16	10	82	3
MAR 31...	49	15	2.8	3.1	.7	13	5.4	70	3
APR 28...	53	16	3.2	3.7	.8	14	5.4	64	7
MAY 19...	67	19	4.7	3.9	.7	14	7.0	91	1
JUN 23...	100	29	6.8	6.9	1.0	20	11	147	0
JUL 14...	99	29	6.5	5.4	.9	18	10	141	6
AUG 11...	100	30	6.5	6.0	1.1	19	11	155	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 19...	--	--	--	--	1.1	--	--	--	4.0
DEC 13...	--	--	--	--	1.1	--	.01	--	6.2
FEB 24...	--	--	--	--	1.0	--	.01	--	1.4
MAR 31...	--	--	--	--	1.4	--	.01	--	--
APR 28...	--	--	--	--	1.1	--	.00	--	3.1
MAY 19...	--	--	--	--	.70	--	.01	--	7.0
JUN 23...	--	--	--	--	1.1	--	.01	--	5.9
JUL 14...	.15	.01	.03	.21	.24	.40	.02	.00	7.4
AUG 11...	.10	.00	.01	.47	.48	.58	.01	.00	5.3

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'09", Sussex County, Hydrologic Unit 02040104, on right bank 1.0 mi (1.6 km) upstream from Flatbrookville, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--65.1 mi² (168.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1923 to current year.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1968, 1969, 1971-75.

REVISED DISCHARGE RECORDS.--WSP 781: Drainage area. WSP 1432: 1924-25(M), 1928(M), 1929, 1930(M), 1932, 1933(M), 1936, 1938(M), 1939-40, 1949(M), 1952-53(M).

GAGE.--Water-stage recorder. Concrete control since Aug. 19, 1929. Datum of gage is 347.73 ft (105.988 m) NGVD. Prior to Jan. 6, 1926, nonrecording gage at same site and datum.

REMARKS.--Discharge records good except those for period of no gage-height record, which are poor. Flow occasionally regulated by ponds above station.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--54 years, 109 ft³/s (3.087 m³/s) 22.74 in/yr (578 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 8	0100	868	24.6	4.14	1.262
Feb. 25	1230	1070	30.3	4.52	1.378
Mar. 5	0945	1050	29.7	4.49	1.369
Mar. 14	Unknown	*2310	65.4	6.45	1.966
Mar. 23	Unknown	1600	45.3	Unknown	
Apr. 5	Unknown	1000	28.3	Unknown	

Minimum discharge, 7.3 ft³/s (0.207 m³/s) Sept. 12, gage height, 1.75 ft (0.533 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft³/s (271 m³/s) Aug. 19, 1955 (gage height, 12.58 ft or 3.834 m, from high-water mark in gage house) from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s (0.10 m³/s) Sept. 25, 26, 1964, Sept. 11, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	189	43	56	37	315	200	150	35	19	12	11
2	37	138	49	54	37	236	350	140	36	19	12	11
3	51	119	48	53	36	193	550	130	32	17	13	11
4	68	119	43	52	36	248	330	115	30	16	15	11
5	46	114	43	51	35	813	770	240	29	16	14	9.4
6	37	121	42	50	35	458	580	155	30	16	13	9.4
7	33	114	298	50	34	330	420	270	35	19	29	9.4
8	31	101	565	49	34	268	340	210	32	22	25	8.9
9	285	93	248	49	34	224	280	170	37	22	19	8.9
10	415	91	189	64	33	193	240	140	127	19	16	8.4
11	178	91	164	65	33	171	220	115	74	17	18	7.8
12	127	83	141	80	32	154	200	95	49	21	16	7.8
13	101	77	124	110	50	270	180	85	42	25	16	7.8
14	88	70	88	120	94	1400	165	78	36	20	16	7.8
15	77	68	103	90	80	700	150	73	36	17	16	7.8
16	68	64	98	70	60	450	135	68	32	16	19	8.9
17	62	62	96	64	44	350	130	65	29	64	18	18
18	54	62	91	58	40	300	120	63	29	30	33	16
19	51	60	81	55	42	310	115	86	29	21	24	16
20	62	58	83	50	42	270	110	60	25	18	23	19
21	434	56	91	48	43	250	105	55	24	16	16	22
22	252	54	78	47	36	500	100	51	23	16	16	20
23	161	53	77	45	44	1300	100	48	22	14	16	20
24	130	51	79	44	93	900	98	47	21	13	14	23
25	141	48	79	43	823	550	290	46	22	13	14	168
26	213	48	66	42	507	400	330	43	23	15	13	138
27	189	48	77	41	375	330	400	40	22	14	12	101
28	141	48	64	40	425	290	250	37	21	13	11	56
29	121	56	60	39	---	260	190	36	23	13	11	40
30	108	62	50	38	---	240	165	39	21	12	10	32
31	157	---	57	38	---	220	---	36	---	12	10	---
TOTAL	3950	2418	3415	1755	3214	12893	7613	2986	1026	585	510	835.3
MEAN	127	80.6	110	56.6	115	416	254	96.3	34.2	18.9	16.5	27.8
MAX	434	189	565	120	823	1400	770	270	127	64	33	168
MIN	31	48	42	38	32	154	98	36	21	12	10	7.8
CFSM	1.95	1.24	1.69	.87	1.77	6.39	3.90	1.48	.53	.29	.25	.43
IN.	2.26	1.38	1.95	1.00	1.84	7.37	4.35	1.71	.59	.33	.29	.48

CAL YR 1976 TOTAL 43187.0 MEAN 118 MAX 1530 MIN 16 CFSM 1.81 IN 24.68
WTR YR 1977 TOTAL 41208.3 MEAN 113 MAX 1400 MIN 7.8 CFSM 1.74 IN 23.54

NOTE.--No gage-height record Mar. 13 to May 24.

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 19...	1400	49	171	8.9	7.5	2	12.1	1.0	20	2	67
DEC 13...	1325	130	116	7.7	2.0	2	14.0	--	20	22	48
FEB 09...	1150	E34	205	7.1	.0	2	12.4	5.0	<20	<2	90
MAR 31...	1415	E220	139	7.4	12.0	2	16.7	<.5	20	350	54
APR 28...	1345	E250	123	7.4	10.0	2	7.4	1.0	20	8	50
MAY 19...	1340	E86	195	7.7	17.0	1	9.2	1.0	130	130	120
JUN 23...	1400	22	229	8.6	20.0	1	7.2	1.0	<20	240	100
JUL 14...	1330	20	228	8.4	23.5	1	6.5	2.0	50	350	100
AUG 11...	1335	17	234	8.7	20.0	1	--	1.0	80	170	98

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 19...	19	4.8	3.3	.8	1.4	16	6.3	4.7	91	5	--
DEC 13...	14	3.1	4.1	.8	--	15	9.8	--	82	6	--
FEB 09...	25	6.7	5.1	.8	--	20	9.5	--	110	6	--
MAR 31...	16	3.4	4.0	.7	--	14	6.3	--	79	6	--
APR 28...	15	3.1	3.9	.7	--	14	5.2	--	65	8	--
MAY 19...	26	13	5.0	.7	.0	18	10	3.3	113	1	--
JUN 23...	29	7.2	6.5	.8	--	19	10	--	151	4	--
JUL 14...	29	6.6	5.2	.9	--	17	9.8	--	131	4	.23
AUG 11...	28	6.8	5.5	1.2	--	19	9.9	--	136	0	.01

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 19...	--	--	--	1.3	150	--	--	--	4.3	1.6
DEC 13...	--	--	--	1.4	--	--	.02	--	6.3	--
FEB 09...	--	--	--	1.4	--	--	.33	--	6.4	--
MAR 31...	--	--	--	1.3	--	--	.01	--	--	--
APR 28...	--	--	--	1.1	--	--	.10	--	5.0	--
MAY 19...	--	--	--	1.1	--	--	.01	--	7.3	--
JUN 23...	--	--	--	.80	--	--	.01	--	5.7	--
JUL 14...	.00	.02	.16	.18	--	.41	.02	.00	6.8	--
AUG 11...	.00	.02	.36	.38	--	.39	.02	.00	5.2	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CH6) (UG/L)
OCT 19...	1400	20	20	0	0	2	10	0	0	5	0
MAY 19...	1340	--	--	0	1	--	10	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 19...	0	0	10	2	100	100	2700	1	4	20	47
MAY 19...	0	--	0	--	--	60	--	0	--	20	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 19...	<.5	.0	5	2	0	20	29	--	0	.0
MAY 19...	.0	--	4	--	0	10	--	1	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY 19...	--	--	--	--	--	--	--	--	--	--

01440090 DELAWARE RIVER NEAR EAST STROUDSBURG, PA (NEAR DUNNFIELD, NJ)

LOCATION.--Lat 41°02'40", long 75°01'42", Monroe County, Hydrologic Unit 02040104, water-quality recorder on right bank opposite Poxono Island, 0.1 mi (0.2 km) upstream from mouth of Vancampens Brook, and 4.4 mi (7.0 km) northeast of East Stroudsburg.

DRAINAGE AREA.--3,830 mi² (9,920 km²), approximately.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1967 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1966 to April 1973, October 1973 to February 1976.
pH: November 1972 to April 1973, October 1973 to February 1976.
WATER TEMPERATURES: October 1966 to April 1973, October 1973 to February 1976.
DISSOLVED OXYGEN: October 1966 to April 1973, October 1973 to February 1976.

REMARKS.--Operated as part of the USGS-EPA surveillance network.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
06...	0900	3410	80	7.2	15.0	2	9.6	10	B48	99
20...	1410	5470	60	6.8	9.0	1	13.6	<10	20	60
NOV										
04...	0800	11290	70	6.6	6.0	2	11.8	11	20	30
15...	1700	6240	90	7.4	4.5	2	11.8	<10	B18	46
DEC										
01...	1615	3710	70	6.9	4.5	3	13.2	<10	B1	B2
13...	1700	6030	80	6.5	2.0	2	13.4	<10	B8	B8
28...	0900	3290	80	6.8	.5	5	11.2	<10	--	--
FEB										
09...	0845	7530	115	7.0	.0	2	12.4	<10	4	41
23...	1430	4640	100	6.9	.5	2	13.2	<10	1	0
MAR										
10...	0845	12000	65	6.5	4.0	3	12.6	<10	11	22
24...	1615	19100	65	6.8	2.0	3	13.0	<10	--	--
APR										
07...	1730	22900	60	6.3	6.0	3	12.5	<10	B12	B12
20...	1015	5680	80	6.9	15.0	1	11.3	<10	B12	B6
MAY										
03...	1300	9090	60	7.7	16.0	1	10.3	6	B9	B18
17...	1500	6710	55	8.1	18.0	2	10.8	5	3	B1
31...	1730	1440	96	8.4	23.0	2	10.8	9	B9	B6
JUN										
14...	1600	1590	75	7.6	21.5	1	9.5	12	62	B9
28...	1530	1700	87	7.8	26.0	1	9.0	11	E10	E6
JUL										
12...	1145	1760	78	7.2	25.0	1	7.8	20	--	47
27...	1615	1210	80	7.9	25.5	1	9.3	15	B4	B14
AUG										
09...	1430	3040	90	7.5	27.0	1	7.4	10	35	270
24...	1230	2500	89	7.6	23.0	1	8.6	10	31	39
SEP										
06...	1500	1440	75	7.1	25.5	0	8.0	9	28	60
20...	1615	3860	78	6.6	21.0	5	9.2	15	E60	330

01440090 DELAWARE RIVER NEAR EAST STROUDSBURG, PA (NEAR DUNNFIELD, NJ)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SUS-PENDED SOLIDS (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT										
06...	--	--	--	--	--	--	50	--	2	.19
20...	--	--	--	--	--	--	35	--	3	.27
NOV										
04...	--	--	--	--	--	--	43	--	7	.30
15...	--	--	--	--	--	--	54	--	1	.41
DEC										
01...	18	0	15	3.6	10	4.6	41	1	3	.31
13...	--	--	--	--	--	--	61	--	1	.43
28...	--	--	--	--	--	--	57	--	3	.42
FEB										
09...	--	--	--	--	--	--	64	--	22	.71
23...	--	--	--	--	--	--	62	--	2	.63
MAR										
10...	17	0	14	8.6	7.5	5.3	42	7	10	.55
24...	--	--	--	--	--	--	26	--	8	.40
APR										
07...	--	--	--	--	--	--	44	--	--	.41
20...	--	--	--	--	--	--	50	--	--	.40
MAY										
03...	--	--	--	--	--	--	42	--	--	.25
17...	--	--	--	--	--	--	40	--	14	.20
31...	--	--	--	--	--	--	57	--	--	.32
JUN										
14...	21	0	17	.8	11	4.5	52	22	--	.33
28...	--	--	--	--	--	--	55	--	--	.26
JUL										
12...	--	--	--	--	--	--	53	--	--	.47
27...	--	--	--	--	--	--	54	--	--	.29
AUG										
09...	--	--	--	--	--	--	66	--	--	.21
24...	--	--	--	--	--	--	54	--	16	.21
SEP										
06...	--	--	--	--	--	--	54	--	1	.33
20...	--	--	--	--	--	--	52	--	13	.47

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)
OCT									
06...	.02	.18	.20	.39	.05	3.7	--	9.78	8.04
20...	.03	.17	.20	.47	.05	3.8	--	.000	.000
NOV									
04...	.05	.15	.20	.50	.03	8.0	--	.000	.000
15...	.09	.46	.55	.96	.03	4.3	--	.000	.000
DEC									
01...	.01	.12	.13	.44	.02	5.7	--	.000	.000
13...	.00	.00	.00	.43	.02	4.3	--	.000	.000
28...	.01	.12	.13	.55	.01	4.7	--	.000	.000
FEB									
09...	.07	.01	.08	.79	.03	3.5	--	.000	.000
23...	.08	.30	.38	1.0	.01	5.2	--	.931	.000
MAR									
10...	.06	.14	.20	.75	.03	4.0	--	.000	.000
24...	.03	.30	.33	.73	.06	2.1	--	1.10	.103
APR									
07...	.05	.25	.30	.71	.02	2.9	0	--	--
20...	.05	.25	.30	.70	.08	1.8	--	--	--
MAY									
03...	.01	.67	.68	.93	.01	5.6	--	2.59	.705
17...	.02	.28	.30	.58	.01	8.0	--	1.16	.000
31...	.12	.30	.42	.74	.03	5.9	--	13.2	1.99
JUN									
14...	.05	.24	.29	.62	.02	5.3	--	4.54	3.19
28...	.06	.34	.40	.86	.01	5.3	--	1.09	.426
JUL									
12...	.09	.38	.47	.96	.01	5.0	--	.291	.000
27...	.06	.15	.21	.50	.01	2.6	--	4.45	.064
AUG									
09...	.11	.47	.58	.79	.03	4.3	--	1.59	.000
24...	.03	.27	.30	.51	.01	5.7	--	.052	.000
SEP									
06...	.02	.24	.26	.59	.02	2.5	--	--	--
20...	.03	.30	.33	.80	.03	10	--	2.11	1.31

01440200 DELAWARE RIVER BELOW TOCKS ISLAND DAMSITE, NEAR DELAWARE WATER GAP, PA

LOCATION.--Lat 41°00'42", long 75°05'09", Warren County, Hydrologic Unit 02040105, on left bank 40 ft (12 m) streamward from River Road, 1.0 mi (1.6 km) downstream from Tocks Island, 3.7 mi (6.0 km) northeast of Delaware Water Gap, PA, 4.0 mi (6.4 km) upstream from bridge on Interstate Highway 80, and at mile 216.1 (347.7 km).

DRAINAGE AREA.--3,850 mi² (9,970 km²) approximately.

PERIOD OF RECORD.--
WATER DISCHARGE: May 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 293.64 ft (89.501 m) NGVD.

REMARKS.--Discharge records good. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--13 years, 6,399 ft³/s (181.2 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85,600 ft³/s (2,420 m³/s) Mar. 14, gage height, 20.86 ft (6.358 m); minimum daily, 1,200 ft³/s (34.0 m³/s) Feb. 3.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 30, 1973, gage height, 23.82 ft (7.260 m); minimum daily, 580 ft³/s (16.4 m³/s) July 7, 8, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3200	9300	3040	2200	1700	18100	38900	9860	1930	2660	2190	2210
2	2980	12700	2530	2300	1500	14300	28900	8450	1850	2580	2660	2210
3	2010	10900	2710	2500	1200	11100	33200	9010	1900	1430	3170	2140
4	3110	10300	2550	2900	1400	10800	30400	7650	1500	1710	2580	1980
5	3610	10800	2010	3000	1500	24900	21900	7530	1850	1980	2420	1770
6	2750	9540	1960	2600	1800	29100	29000	11900	2060	2580	2190	1980
7	2600	8610	3850	2000	2400	20400	25300	11900	2160	1930	1590	2600
8	2270	7730	9250	2900	2700	14800	21700	9820	2110	2580	2270	2400
9	5610	7970	12600	2900	3000	12000	18300	8570	1880	2500	2890	2140
10	41300	7030	10500	2900	2700	10900	15100	10100	3430	2290	2710	2110
11	22700	6460	7730	2300	2500	12400	14300	10500	4550	1670	2370	1600
12	13600	6220	6220	3200	2400	14100	13000	10000	3540	2550	2320	1570
13	10400	5900	5650	3100	2300	17800	11300	10200	2660	2600	1750	1660
14	9010	5010	5610	3000	2100	67500	10500	9620	2270	2660	1500	1960
15	8650	4730	5190	2900	2600	64200	9800	8610	2580	2810	1930	1710
16	7370	4870	4550	2500	3000	39200	8670	7810	2270	2470	2550	2290
17	6060	4760	4060	1900	3500	28100	6590	7420	2270	2110	2320	2760
18	5440	4130	3920	2100	3000	21200	5960	6290	2450	2600	2400	4270
19	5720	3720	3380	3200	2600	18100	6240	6430	2500	3220	1850	4020
20	5050	3430	2780	2700	2300	14900	5680	6070	2630	3410	2450	3850
21	13700	3510	3460	2900	2100	12000	4870	6070	3220	3300	2010	6570
22	30400	3350	3950	2600	1900	13100	5080	4550	3280	3350	1770	10100
23	19800	3410	4090	2600	2100	24100	4270	3900	2760	1660	2160	7280
24	14400	3280	3510	2600	2700	20100	5610	3870	2660	1360	2730	5650
25	13300	3070	2600	2400	8000	15800	22300	3870	2840	1880	2470	6890
26	15900	2420	2340	2600	11000	13600	21200	3690	2600	1520	2450	29800
27	16100	2370	1930	2300	13000	11400	18000	3220	2400	1430	1800	38100
28	13200	2190	2290	2100	16000	11200	16300	2420	2370	1270	1620	23000
29	11500	2160	2680	2100	---	13500	13600	2110	2760	2160	1290	14600
30	10400	2940	2900	1300	---	26900	11800	1930	2680	2090	1470	11400
31	9800	---	2500	1400	---	40700	---	1880	---	2140	2040	---
TOTAL	331940	172860	132340	78800	103000	666300	477770	215250	75960	70500	67920	200620
MEAN	10710	5762	4269	2542	3679	21490	15930	6944	2532	2274	2191	6687
MAX	41300	12700	12600	3200	16000	67500	38900	11900	4550	3410	3170	38100
MIN	2010	2160	1930	1300	1200	10800	4270	1880	1500	1270	1290	1570

CAL YR 1976 TOTAL 2757840 MEAN 7535 MAX 75300 MIN 1500
WTR YR 1977 TOTAL 2593260 MEAN 7105 MAX 67500 MIN 1200

01443000 DELAWARE RIVER AT PORTLAND, PA

LOCATION.--Lat 40°55'26", long 75°05'46", Northampton County, Hydrologic Unit 02040105, at walkbridge connecting Portland, PA, and Columbia, NJ.

DRAINAGE AREA.--4,165 mi^2 (10,787 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 05...	1200	82	8.0	16.0	1	--	.5	170	33
DEC 06...	1200	104	7.9	.0	3	14.2	--	50	5
MAR 01...	1015	70	6.2	3.0	10	17.8	2.0	80	49
30...	1150	105	7.0	8.0	3	12.2	<.5	<20	33
APR 27...	1200	62	6.7	9.0	5	11.0	2.0	80	33
MAY 18...	1150	69	3.7	17.0	2	9.6	2.0	<20	140
JUN 21...	1145	93	8.2	22.0	1	6.0	1.0	490	170
AUG 16...	1215	94	7.7	19.0	1	10.5	1.0	790	17

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 05...	28	8.0	2.0	4.3	1.0	8.6	5.1	56	5
DEC 06...	43	13	2.6	7.0	1.1	13	8.6	61	9
MAR 01...	17	5.7	.7	3.6	1.5	9.8	5.8	64	30
30...	25	7.5	1.6	3.5	1.0	10	6.1	50	9
APR 27...	23	6.4	1.7	2.6	.7	11	4.0	46	7
MAY 18...	26	7.5	1.8	3.0	.9	9.8	4.3	13	3
JUN 21...	33	10	1.9	4.1	.9	11	6.0	57	0
AUG 16...	32	10	1.7	3.6	.9	11	6.2	56	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	--	--	--	--	1.1	--	--	--	4.1
DEC 06...	--	--	--	--	1.1	--	--	--	3.6
MAR 01...	--	--	--	--	1.4	--	.12	--	5.4
30...	--	--	--	--	2.3	--	.06	--	--
APR 27...	--	--	--	--	1.1	--	.02	--	5.1
MAY 18...	--	--	--	--	1.4	--	.00	--	7.0
JUN 21...	--	--	--	--	1.1	--	.01	--	6.0
AUG 16...	.22	.00	.00	.35	.35	.57	.02	.02	9.5

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'44", long 74°57'15", Warren County, Hydrologic Unit 02040105, 1,200 ft (370 m) upstream from bridge on State Highway 94 in Blairstown, 1,400 ft (430 m) upstream from Blairs Creek, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1921-76.
CHEMICAL ANALYSES: Water years 1921, 1925, 1957-60, 1962-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT									
06...	1000	360	8.0	14.0	1	10.4	.5	230	240
DEC									
06...	1100	441	8.2	.5	3	14.4	—	<20	130
FEB									
09...	1100	420	7.2	.5	3	7.4	7.0	<20	<2
MAR									
30...	1040	292	7.0	10.0	2	10.6	<.5	20	23
APR									
27...	1030	295	7.9	11.0	5	7.9	1.0	790	240
MAY									
10...	1040	349	8.0	17.5	2	9.2	3.0	80	170
JUN									
21...	1030	374	8.3	20.0	1	7.6	2.0	70	240
JUL									
05...	0945	442	8.7	24.0	1	6.3	2.0	20	13
AUG									
16...	1015	460	8.4	20.0	1	5.0	2.0	170	23

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
06...	150	36	14	17	1.9	25	26	211	6
DEC									
06...	180	46	17	16	1.7	29	32	233	8
FEB									
09...	180	44	17	17	1.9	30	32	233	16
MAR									
30...	110	29	10	11	1.4	21	21	174	6
APR									
27...	130	34	11	13	1.3	21	22	160	7
MAY									
10...	180	50	14	13	1.5	23	23	212	1
JUN									
21...	150	34	15	14	1.3	21	26	186	14
JUL									
05...	180	41	19	16	1.5	23	31	233	6
AUG									
16...	200	47	20	19	2.0	24	37	296	8

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
06...	--	--	--	--	.90	--	--	--	4.9
DEC									
06...	--	--	--	--	1.1	--	--	--	4.0
FEB									
09...	--	--	--	--	1.0	--	.09	--	6.1
MAR									
30...	--	--	--	--	1.3	--	.03	--	--
APR									
27...	--	--	--	--	1.3	--	.05	--	3.2
MAY									
10...	--	--	--	--	1.4	--	.03	--	8.4
JUN									
21...	--	--	--	--	1.3	--	.04	--	6.4
JUL									
05...	.12	.01	.04	.59	.63	.76	.04	.02	5.1
AUG									
16...	.36	.01	.08	.74	.82	1.2	.13	.07	8.7

01443900 YARDS CREEK NEAR BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'51", long 75°02'25", Warren County, Hydrologic Unit 02040105, on left bank 100 ft (30 m) upstream from bridge on Hainesburg-Mount Vernon Road, 2.2 mi (3.5 km) northeast of Hainesburg, 2.4 mi (3.9 km) upstream from mouth, and 4.2 mi (6.8 km) west of Blairstown.

DRAINAGE AREA.--7.16 mi^2 (18.54 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 618 ft (188 m), from topographic map.

REMARKS.--Discharge records fair except those for periods of no gage-height record, which are poor. Complete regulation by the Jersey Central Power and Light Co., at Yards Creek Reservoir above station.

AVERAGE DISCHARGE.--11 years, 10.9 ft^3/s (0.309 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 340 ft^3/s (9.63 m^3/s) Feb. 24, gage height, 3.92 ft (1.195 m); minimum daily, 0.49 ft^3/s (0.01 m^3/s) Sept. 12.

REVISIONS.--Revised daily discharges for the water year 1976, in cubic feet per second, are given below. These figures supersede those published in WDR NJ-75-1.

Sept. 26	2.7	Total	50.38
27	3.4	Mean	1.70
28	1.6	Max	5.8
29	.97	Min	.81
30	.93		

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft^3/s (9.63 m^3/s) Feb. 24, 1977, gage height, 3.92 ft (1.195 m); no flow Sept. 12, 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	22	7.0	1.9	1.2	30	16	10	1.4	.70	1.9	1.1
2	1.7	23	7.2	1.8	1.3	40	20	9.0	1.6	.68	1.9	1.1
3	3.2	22	6.1	1.7	1.5	40	19	9.0	1.3	.61	2.8	1.0
4	2.0	24	5.8	1.6	1.8	57	16	10	1.2	.56	2.2	.83
5	8.4	25	5.9	1.5	1.7	57	29	11	1.1	.54	2.2	.61
6	9.6	24	5.5	1.6	1.4	42	27	12	1.2	.56	2.3	.54
7	9.6	21	11	1.8	1.5	44	27	12	1.3	1.1	2.3	.65
8	9.6	19	23	1.8	1.8	60	26	10	1.2	1.5	1.9	.70
9	22	20	14	2.0	1.8	61	25	10	3.7	1.2	1.8	.70
10	15	15	9.6	2.0	1.9	61	23	10	3.4	1.1	2.0	.65
11	11	14	7.0	1.7	2.2	48	21	9.5	1.8	.89	2.1	.61
12	10	14	5.8	1.6	2.6	24	22	10	1.5	1.8	2.1	.49
13	10	14	5.0	2.2	3.4	41	23	9.5	1.2	2.1	2.3	.68
14	11	14	4.1	13	2.8	69	23	9.5	1.1	1.1	2.1	.83
15	13	13	4.3	79	3.2	90	24	8.5	1.1	1.1	1.7	1.0
16	24	13	4.1	68	2.6	92	24	8.0	1.0	1.3	.80	2.0
17	21	13	3.8	122	2.6	92	22	7.1	.95	1.3	2.1	2.3
18	20	14	3.6	225	2.4	94	20	4.6	1.0	.89	1.0	1.1
19	21	11	3.2	182	2.3	54	21	4.5	1.1	.83	.70	1.3
20	24	10	3.3	104	2.3	24	21	4.3	1.4	1.0	.70	1.9
21	28	9.0	3.6	73	1.8	23	22	4.3	1.3	.89	.68	1.6
22	24	8.4	3.0	2.8	1.8	45	23	4.1	.83	.89	1.1	1.5
23	24	7.8	3.1	2.2	2.6	37	19	3.8	.83	1.8	.70	1.5
24	23	7.4	3.3	1.8	11	30	15	3.8	.89	1.8	.70	3.7
25	22	7.0	2.9	1.9	118	54	12	3.7	1.1	1.8	.68	7.7
26	25	6.9	2.5	2.0	33	54	12	3.8	1.1	1.8	.68	4.8
27	22	7.0	2.7	2.0	27	54	12	3.4	.70	1.8	.70	3.2
28	21	7.1	2.5	1.9	25	54	11	1.7	.95	1.8	.65	2.3
29	23	7.8	2.2	1.6	---	41	11	1.5	1.1	2.0	.59	2.0
30	23	8.4	2.2	1.3	---	16	11	1.4	.76	2.1	.65	1.8
31	27	---	1.8	1.2	---	16	---	1.2	---	2.0	1.0	---
TOTAL	509.5	421.8	169.1	907.9	262.5	1552	597	211.2	39.11	39.54	45.03	50.19
MEAN	16.4	14.1	5.45	29.3	9.38	50.1	19.9	6.81	1.30	1.28	1.45	1.67
MAX	28	25	23	225	118	94	29	12	3.7	2.1	2.8	7.7
MIN	1.4	6.9	1.8	1.2	1.2	16	11	1.2	.70	.54	.59	.49

CAL YR 1976 TOTAL 4561.28 MEAN 12.4 MAX 134 MIN .81
WTR YR 1977 TOTAL 4804.87 MEAN 13.2 MAX 225 MIN .49

NOTE.--Doubtful or no gage-height record Nov. 19 to Feb. 15.

01444100 PAULINS KILL AT MOUTH AT COLUMBIA, NJ

LOCATION.--Lat 40°55'14", long 75°05'18", Warren County, Hydrologic Unit 02040206, at bridge on U.S. Route 46, 2.3 mi (3.7 km) southwest of Polkville, and 3.2 mi (5.2 km) southeast of Knowlton.

DRAINAGE AREA.--177 mi² (458 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.- Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT											
05...	1330	--	8.0	14.0	--	10.0	1.0	140	110	150	39
DEC											
06...	1300	398	8.4	1.0	4	16.2	--	110	2	130	34
FEB											
09...	[illegible]	401	7.1	.0	2	14.6	5.0	20	33	170	42
MAR											
30...	1330	292	7.8	11.0	3	13.4	1.0	<20	23	120	30
APR											
27...	1315	290	7.7	11.0	4	9.3	2.0	230	280	140	36
MAY											
10...	1320	342	7.9	17.5	1	9.4	2.0	330	11	160	39
JUN											
21...	1310	372	8.3	21.0	1	8.3	2.0	33	540	150	36
JUL											
05...	1210	429	8.5	24.0	1	9.2	2.0	130	7	190	44
AUG											
16...	1300	445	8.2	20.0	1	8.4	1.0	230	79	190	45

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT										
05...	13	11	1.7	.4	24	22	5.4	180	--	--
DEC										
06...	12	13	1.5	--	27	25	--	200	12	--
FEB										
09...	17	14	1.6	--	28	26	--	223	0	--
MAR										
30...	11	10	1.4	--	21	20	--	167	5	--
APR										
27...	12	11	1.2	--	21	18	--	183	4	--
MAY										
10...	14	11	1.3	.0	23	20	1.6	130	9	--
JUN										
21...	15	12	1.3	--	22	23	--	200	1	--
JUL										
05...	19	14	1.5	--	22	26	--	262	5	.40
AUG										
16...	19	16	1.8	--	23	32	--	255	3	.45

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT										
05...	--	--	--	1.3	570	--	--	--	--	4.2
DEC										
06...	--	--	--	1.1	--	--	--	--	4.7	--
FEB										
09...	--	--	--	1.7	--	--	.04	--	7.3	--
MAR										
30...	--	--	--	1.5	--	--	.02	--	--	--
APR										
27...	--	--	--	1.1	--	--	.03	--	4.1	--
MAY										
10...	--	--	--	1.4	--	--	.04	--	6.4	--
JUN										
21...	--	--	--	1.4	--	--	.02	--	5.0	--
JUL										
05...	.01	.04	.25	.29	--	.70	.04	.02	5.7	--
AUG										
16...	.01	.07	.35	.42	--	.88	.07	.05	9.0	--

01444100 PAULINS KILL AT MOUTH AT COLUMBIA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 05...	1330	50	30	20	1	0	30	0	0	31	0
MAY 10...	1320	--	--	10	1	--	40	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 05...	1	10	0	10	190	120	14000	2	22	40	750
MAY 10...	0	--	2	--	--	130	--	2	--	90	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 05...	<.5	.0	2	10	0	20	89	--	0	.0
MAY 10...	.0	--	2	--	0	60	--	1	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY 10...	--	--	--	--	--	--	--	--	--	--

01444800 DELAWARE RIVER NEAR RICHMOND, PA (BELVIDERE, NJ)

LOCATION.--Lat 40°49'44", long 75°05'06", Warren County, NJ, Hydrologic Unit 02040104, at bridge at Belvidere, 4.1 mi (6.5 km) southwest of Buttzville, and 200 ft (61 m) upstream from Pequest River.

DRAINAGE AREA.--4,380 mi² (11,344 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT									
05...	1300	102	8.1	15.0	2	11.0	.0	230	23
DEC									
01...	1300	108	8.9	1.5	1	13.9	2.0	20	4
FEB									
02...	1230	--	7.3	2.0	4	14.4	3.0	<20	<2
MAR									
16...	1245	132	7.1	10.0	20	10.2	3.0	20	46
30...	1330	202	7.0	11.0	3	13.4	1.0	<20	23
APR									
21...	1300	103	7.1	15.0	2	10.2	2.0	20	22
MAY									
17...	1300	81	7.7	16.0	2	10.8	2.0	<20	<2
JUN									
14...	1150	108	7.8	21.0	2	3.5	1.0	<20	2
JUL									
13...	1020	106	7.5	25.0	1	2.4	1.0	50	<2
AUG									
09...	1015	104	--	26.5	1	7.3	<.5	20	70

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
05...	34	9.8	2.4	4.4	.9	12	8.8	68	7
DEC									
01...	39	11	2.9	5.7	.9	15	7.5	72	8
FEB									
02...	45	13	3.0	5.4	.9	16	8.9	85	14
MAR									
16...	48	12	4.4	4.3	1.3	14	6.9	81	63
30...	120	30	11	10	1.4	21	20	167	5
APR									
21...	39	9.9	3.5	3.9	.8	12	6.2	57	2
MAY									
17...	29	8.2	2.0	3.3	.9	12	4.5	44	7
JUN									
14...	39	11	2.7	5.7	.9	14	7.3	78	8
JUL									
13...	38	11	2.5	4.7	1.1	12	6.1	59	30
AUG									
09...	34	10	2.3	5.6	1.3	13	6.7	67	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
05...	--	--	--	--	.80	--	--	--	3.5
DEC									
01...	--	--	--	--	1.1	--	--	--	5.6
FEB									
02...	--	--	--	--	1.7	--	.05	--	7.4
MAR									
16...	--	--	--	--	1.4	--	.13	--	10
30...	--	--	--	--	1.5	--	.06	--	--
APR									
21...	--	--	--	--	1.1	--	.02	--	1.4
MAY									
17...	--	--	--	--	1.1	--	.01	--	3.2
JUN									
14...	--	--	--	--	1.1	--	.01	--	5.5
JUL									
13...	.42	.01	.04	.42	.46	.89	.01	.01	4.7
AUG									
09...	.26	.00	.01	.37	.38	.64	.03	.00	5.3

01445430 PEQUEST RIVER AT TOWNSBURY, NJ

LOCATION.--Lat 40°51'06", long 74°56'02", Warren County, Hydrologic Unit 02040105, on left upstream abutment of highway bridge in Townsbury and 2.1 mi (3.4 km) upstream from Furnace Brook.

DRAINAGE AREA.--92.5 mi² (239.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: June to September 1977.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (146 m), from topographic map.

REMARKS.--Discharge records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 137 ft³/s (3.88 m³/s) Sept. 27, gage height, 1.91 ft (0.582 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 16, gage height, 1.11 ft (0.338 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	56	36	14	15
2								---	54	34	15	15
3								---	48	31	20	15
4								---	44	29	31	15
5								---	50	28	23	14
6								---	78	27	20	14
7								---	56	32	20	14
8								---	48	40	21	13
9								---	43	34	22	13
10								---	48	29	17	13
11								---	62	27	19	13
12								---	60	31	18	12
13								---	54	36	19	12
14								---	50	31	20	11
15								---	48	27	19	11
16								---	45	24	17	11
17								94	43	27	21	34
18								94	42	24	26	25
19								94	45	21	21	21
20								88	52	26	18	24
21								80	60	24	16	24
22								75	46	20	23	22
23								69	42	17	22	20
24								66	41	16	20	26
25								64	54	16	19	94
26								56	65	18	17	108
27								53	50	15	16	121
28								48	47	14	16	82
29								51	54	14	16	54
30								51	40	14	16	42
31								54	---	14	16	---
TOTAL	---	---	---	---	---	---	---	---	1525	776	598	908
MEAN	---	---	---	---	---	---	---	---	50.8	25.0	19.3	30.3
MAX	---	---	---	---	---	---	---	---	78	40	31	121
MIN	---	---	---	---	---	---	---	---	40	14	14	11

01445500 PEQUEST RIVER AT PEQUEST, NJ

LOCATION.--Lat 40°49'43", long 74°58'45", Warren County, Hydrologic Unit 02040105, on right bank at Pequest, 100 ft (30 m) upstream from Lehigh and Hudson River Railway Bridge, and 300 ft (91 m) downstream from Furnace Brook.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.
CHEMICAL ANALYSES: Water years 1958 to current year.

REVISED DISCHARGE RECORDS.--WSP 1902: 1940(M), 1945, 1955(M), 1957, 1959(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1929. Datum of gage is 398.78 ft (121.548 m) NGVD. Prior to June 22, 1926, nonrecording gage at site 10 ft (3 m) upstream at same datum.

REMARKS.--Discharge records good except those for periods of no gage-height record, which are poor.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years, 152 ft³/s (4.305 m³/s), 19.11 in/yr (485 mm/yr).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 24	Unknown	800	22.7	Unknown		Mar. 22	2315	1240	34.1	4.41	1.344
Mar. 4	Unknown	820	23.2	Unknown		Apr. 5	1100	709	20.1	3.30	1.006
Mar. 14	0345	*1250	35.4	4.42	1.347						

Minimum daily discharge, 20 ft³/s (0.57 m³/s) Sept. 14, 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft³/s (51.3 m³/s) Mar. 14, 1936, gage height, 4.97 ft (1.515 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 17-22, Dec. 10, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	175	58	58	34	260	313	180	74	60	43	26
2	64	145	70	56	32	200	332	172	79	57	36	26
3	80	123	51	51	30	220	461	165	74	54	47	26
4	85	112	63	49	33	820	396	159	69	51	56	26
5	71	111	59	65	35	500	628	206	65	50	45	26
6	65	117	57	63	31	380	598	203	68	49	41	26
7	61	108	274	66	29	340	505	237	75	54	43	25
8	59	100	287	58	28	318	439	238	71	63	42	24
9	168	93	153	65	27	296	388	222	86	56	51	24
10	189	90	155	66	29	271	357	210	160	51	42	24
11	121	87	123	67	40	252	333	191	133	49	42	23
12	91	84	86	67	60	233	312	174	99	52	40	22
13	80	82	80	62	80	404	293	158	85	58	38	21
14	74	78	90	62	92	1160	276	143	78	52	36	20
15	71	77	100	61	78	883	257	133	74	48	34	20
16	67	75	95	58	58	703	240	127	71	45	32	29
17	63	74	91	56	46	538	226	121	67	47	36	58
18	63	74	86	52	67	459	216	120	64	45	45	45
19	67	74	79	50	64	464	206	126	67	42	38	39
20	80	72	84	45	60	441	197	117	75	49	33	41
21	225	71	90	47	100	397	191	109	93	46	32	40
22	162	68	67	49	200	653	181	103	74	43	40	38
23	122	66	75	52	400	1140	173	97	66	39	37	37
24	102	65	78	53	780	972	198	92	61	37	35	80
25	121	65	71	52	560	769	263	88	77	37	33	140
26	186	63	65	49	330	603	268	86	101	40	31	160
27	158	65	74	46	380	516	300	79	78	37	28	136
28	128	66	60	43	350	456	268	76	71	36	28	108
29	111	74	63	40	---	421	226	72	84	35	28	77
30	101	75	64	40	---	385	198	73	65	35	27	64
31	149	---	60	37	---	349	---	72	---	34	27	---
TOTAL	3242	2629	2908	1685	4053	15803	9239	4349	2404	1451	1166	1451
MEAN	105	87.6	93.8	54.4	145	510	308	140	80.1	46.8	37.6	48.4
MAX	225	175	287	67	780	1160	628	238	160	63	56	160
MIN	58	63	51	37	27	200	173	72	61	34	27	20
CFSM	.97	.81	.87	.50	1.34	4.72	2.85	1.30	.74	.43	.35	.45
IN.	1.12	.91	1.00	.58	1.40	5.44	3.18	1.50	.83	.50	.40	.50

CAL YR 1976 TOTAL 52648 MEAN 144 MAX 1150 MIN 41 CFSM 1.33 IN 18.13
WTR YR 1977 TOTAL 50380 MEAN 138 MAX 1160 MIN 20 CFSM 1.28 IN 17.35

NOTE.--No gage-height record Jan. 15 to Mar. 8 and Aug. 13 to Sept. 26.

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	1000	72	483	8.3	1.5	2	10.4	--	330	130	230
DEC 01...	1000	46	502	8.2	1.0	3	14.8	--	110	540	250
FEB 02...	1025	E32	--	8.1	4.0	5	13.6	4.0	50	7	240
MAR 16...	1015	723	330	7.6	10.0	15	13.5	2.0	130	920	150
APR 21...	1030	193	457	8.5	14.0	2	11.5	3.0	80	79	210
MAY 17...	1020	124	459	8.2	15.0	3	8.9	1.0	50	130	220
JUN 14...	1025	70	465	8.3	17.5	2	6.9	<.5	50	8	220
JUL 05...	1105	50	484	8.2	19.0	1	9.5	2.0	70	33	240
AUG 16...	1040	E32	501	7.9	20.0	1	8.8	--	170	240	230

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 05...	55	23	10	2.2	.0	43	19	8.4	287	0
DEC 01...	55	27	14	1.7	--	37	20	--	291	12
FEB 02...	53	26	15	1.6	--	41	26	--	297	6
MAR 16...	35	15	7.1	1.9	--	26	14	--	180	68
APR 21...	44	24	9.0	1.4	--	27	17	--	263	1
MAY 17...	52	23	9.5	1.4	--	27	17	--	243	0
JUN 14...	50	24	11	1.4	--	28	19	--	245	0
JUL 05...	52	26	10	1.7	--	28	16	--	294	0
AUG 16...	49	25	14	1.7	--	32	21	--	294	9

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 05...	--	--	--	--	1.4	300	--	--	4.4	4.6
DEC 01...	--	--	--	--	1.4	--	--	--	7.0	--
FEB 02...	--	--	--	--	2.2	--	--	.08	6.9	--
MAR 16...	--	--	--	--	1.4	--	--	.09	9.2	--
APR 21...	--	--	--	--	1.1	--	--	.01	2.0	--
MAY 17...	--	--	--	--	1.0	--	--	.06	5.0	--
JUN 14...	--	--	--	--	1.1	--	--	.02	6.3	--
JUL 05...	--	--	--	--	1.1	--	--	.02	6.2	--
AUG 16...	1.5	.01	.04	.32	.36	--	1.9	.07	6.0	--

01445500 PEQUEST RIVER AT PEQUEST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)
OCT 05...	1000	40	40	0	1	5	30	1	0	100	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)
OCT 05...	0	30	10	30	170	90	38000	1	60	20

DATE	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)
OCT 05...	1300	<.5	.0	5	50	0	10	380	34	.0

DATE	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
OCT 05...	5	1.9	1.9	2.0	.9	.0	.0	.0	.0	0

01446000 BEAVER BROOK NEAR BELVIDERE, NJ

LOCATION.--Lat 40°50'40", long 75°02'48", Warren County, Hydrologic Unit 02040105, on right bank 2.0 mi (3.2 km) east of Belvidere, and 2,000 ft (610 m) upstream from mouth.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1922-61, 1963 to current year.
CHEMICAL ANALYSES: Water years 1923-25, 1958, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 05...	1130	398	8.5	14.0	1	15.4	--	790	350	180	44
DEC 01...	1100	414	8.3	.0	1	15.6	2.0	40	70	220	52
FEB 02...	1100	--	9.5	1.0	5	14.6	1.0	20	5	220	52
MAR 16...	1105	315	7.6	10.0	3	13.0	2.0	80	70	130	32
APR 21...	1145	414	8.4	15.0	2	11.1	3.0	<20	220	180	42
MAY 17...	1130	406	8.4	17.0	2	11.1	2.0	190	33	230	54
JUN 14...	1110	407	8.3	18.0	3	8.5	<.5	50	17	200	49
JUL 05...	1310	439	9.0	23.0	1	12.0	3.0	1100	>2400	210	50
AUG 16...	1340	453	8.4	18.0	1	9.8	1.0	230	11	220	52

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 05...	16	8.6	1.9	.2	35	10	6.9	238	4	--
DEC 01...	22	8.2	1.6	--	34	14	--	250	8	--
FEB 02...	21	7.2	1.3	--	36	16	--	264	2	--
MAR 16...	13	7.0	1.6	--	27	13	--	155	15	--
APR 21...	19	7.1	1.2	--	28	13	--	237	5	--
MAY 17...	22	7.4	1.2	--	29	13	--	246	2	--
JUN 14...	19	7.3	1.3	--	30	14	--	237	1	--
JUL 05...	21	7.3	1.5	--	29	13	--	230	4	.65
AUG 16...	23	7.2	1.4	--	32	14	--	267	8	.38

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 05...	--	--	--	1.1	83	--	--	--	3.7	7.9
DEC 01...	--	--	--	1.3	--	--	--	--	4.2	--
FEB 02...	--	--	--	1.4	--	--	.03	--	2.4	--
MAR 16...	--	--	--	1.3	--	--	.07	--	7.7	--
APR 21...	--	--	--	1.1	--	--	.01	--	1.2	--
MAY 17...	--	--	--	1.4	--	--	.02	--	7.0	--
JUN 14...	--	--	--	1.3	--	--	.01	--	5.6	--
JUL 05...	.01	.02	.69	.71	--	1.4	.02	.00	7.1	--
AUG 16...	.01	.00	.42	.42	--	.81	.02	.01	9.3	--

01446000 BEAVER BROOK NEAR BELVIDERE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 05...	1130	30	20	10	1	4	30	1	0	10	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 05...	0	0	10	10	160	110	6700	0	10	10

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 05...	260	<.5	.0	1	10	0	0	20	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 05...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01446400 PEQUEST RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at last highway bridge before mouth, and 0.3 mi (0.4 km) upstream from mouth.

DRAINAGE AREA.--158 mi² (409 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1957, 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT										
05...	1400	462	8.7	14.0	3	15.2	--	490	230	210
DEC										
01...	1400	470	8.3	1.0	2	15.2	2.0	270	350	240
FEB										
02...	1145	--	8.4	2.0	5	15.1	3.0	130	130	230
MAR										
16...	1330	333	7.8	12.0	15	12.9	2.0	80	23	130
APR										
21...	1400	423	8.0	16.0	2	12.2	2.0	130	170	200
MAY										
17...	1345	422	8.7	18.5	2	8.8	2.0	20	130	220
JUN										
14...	1230	419	8.5	18.0	2	7.5	1.0	<20	22	210
JUL										
05...	1230	461	8.6	22.0	1	9.6	2.0	2400	130	210
AUG										
16...	1120	435	8.1	21.0	1	7.7	1.0	490	7	210

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT										
05...	51	21	11	2.1	--	40	20	--	276	11
DEC										
01...	54	25	12	1.7	--	35	18	--	278	12
FEB										
02...	52	24	13	1.4	--	36	24	--	289	13
MAR										
16...	36	9.3	8.1	.9	--	26	13	--	180	40
APR										
21...	42	22	9.3	1.2	--	28	17	--	244	8
MAY										
17...	50	22	9.4	1.4	.0	27	16	3.4	275	4
JUN										
14...	49	22	11	1.3	--	30	20	--	271	3
JUL										
05...	48	23	9.8	1.4	--	28	16	--	275	3
AUG										
16...	46	23	12	1.5	--	31	18	--	293	14

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
05...	--	--	--	--	1.1	--	--	--	4.9
DEC									
01...	--	--	--	--	1.4	--	--	--	5.9
FEB									
02...	--	--	--	--	1.7	--	.05	--	--
MAR									
16...	--	--	--	--	1.4	--	.08	--	8.7
APR									
21...	--	--	--	--	1.4	--	.01	--	1.4
MAY									
17...	--	--	--	--	1.1	--	.04	--	4.8
JUN									
14...	--	--	--	--	1.4	--	.01	--	5.4
JUL									
05...	--	--	--	--	1.4	--	.03	--	5.8
AUG									
16...	1.1	.01	.03	.18	.21	1.3	.07	.04	5.0

01446400 PEQUEST RIVER AT BELVIDERE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
MAY 17...	1345	40	0	0	0	0	0	65	540

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 17...	70	19	70	.0	12	0	80	1

01446500 DELAWARE RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'36", long 75°05'02", Warren County, Hydrologic Unit 02040105, on left bank at Belvidere, 800 ft (240 m) downstream from Pequest River, and at mile 197.7 (318.1 km).

DRAINAGE AREA.--4,535 mi² (11,746 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1922 to current year.

REVISED DISCHARGE RECORDS.--WSP 781: 1933(M). WSP 951: 1940-41, Drainage area. WSP 1432: 1923, 1924(M).

GAGE.--Water-stage recorder. Datum of gage is 226.43 ft (69.016 m) NGVD. Prior to Jan. 1, 1929, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Discharge records excellent. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--55 years, 7,915 ft³/s (224.1 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103,000 ft³/s (2,917 m³/s) Mar. 14, gage height, 18.90 ft (5.578 m); minimum, 1,360 ft³/s (38.5 m³/s) Jan. 31, gage height, 2.80 ft (0.853 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 273,000 ft³/s (7,730 m³/s) Aug. 19, 1955 (gage height, 30.21 ft or 9.208 m, from high-water mark in gage house), from rating curve extended above 170,000 ft³/s (4,810 m³/s) on basis of flood-routing study; minimum, 609 ft³/s (17.2 m³/s) Sept. 28, 29, 1943, gage height, 2.11 ft (0.643 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 28.6 ft (8.72 m), from floodmark, discharge, 220,000 ft³/s (6,230 m³/s) from rating curve extended above 170,000 ft³/s (4,810 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4060	14000	3550	2690	1680	21200	44800	11800	2150	2640	2130	2130
2	3940	16400	3100	2820	2240	18100	34200	10400	2280	2550	2390	2240
3	3490	14200	2980	2670	1780	14800	30700	10700	2170	2190	3060	2020
4	4210	13000	2580	3260	1720	15800	37300	9440	2050	1820	2660	2050
5	4810	13000	2760	3520	1780	34100	33100	9480	2130	2080	2400	1810
6	3940	13000	9680	3140	2120	38100	35000	13100	2280	2260	2240	1940
7	3670	12200	12700	2690	2670	27600	38000	14000	2420	2260	2120	2210
8	3160	11200	12700	3100	3000	20600	25600	12100	2350	2000	2210	2390
9	6520	10600	11600	3340	3670	16600	21700	10500	2370	2550	2550	2170
10	38500	9920	10600	3100	3380	15000	18800	11000	4060	2510	2690	2030
11	32100	9120	9160	2600	2800	15800	16800	12300	5260	1970	2390	2100
12	18100	8760	8080	3550	3020	17600	15400	11700	4120	2300	2260	1720
13	13700	8360	6400	3380	3100	22100	13900	11700	3060	2500	2100	1690
14	11800	7360	6400	3400	3260	75600	12800	11200	2400	2640	1970	2100
15	10800	6880	6200	3700	2960	80000	11900	10200	2710	2670	2080	1920
16	10100	7000	6160	3160	3140	49000	10900	9240	2460	2710	2170	2100
17	8320	6600	6000	2280	3910	35200	8920	8840	2390	2130	2390	2760
18	7280	6280	5140	2670	3050	25000	7640	7480	2400	2500	2570	3670
19	7320	5800	4570	4090	3300	22000	7880	7520	2710	2710	2080	4570
20	6640	5230	4900	3460	2800	18500	7200	7080	2800	3320	2190	3670
21	10600	5020	4150	3320	2760	15500	6480	7040	3120	3140	2170	4990
22	30900	5020	4360	3040	2620	19000	5770	5320	3360	3360	1950	11200
23	26400	4930	4570	3000	2690	35000	5320	4600	2800	2390	2060	8040
24	18600	4930	3760	2960	3460	29000	7720	4450	2730	1610	2460	6280
25	15700	4090	3040	2580	13300	22800	16700	4180	2820	2000	2420	7560
26	17200	3400	3180	3160	15900	19400	23400	4030	2920	1840	2330	28100
27	19400	3340	2690	2820	19500	16300	20400	3520	2670	1700	2130	38300
28	17100	3280	3060	2510	20200	15600	18500	2710	2220	1520	1550	25000
29	14700	3970	3320	2490	---	17700	15600	2400	2080	1890	1660	15400
30	13400	4420	3160	1970	---	28600	13800	2220	2750	2080	1890	12000
31	12600	---	2800	1470	---	45200	---	2170	---	2120	2350	---
TOTAL	399060	241310	173430	91940	136770	846800	566230	253320	82920	73000	69620	204160
MEAN	12870	8044	5595	2966	4885	27320	18870	8172	2764	2355	2246	6805
MAX	38500	16400	12700	4090	20200	80000	44800	14000	5260	3360	3060	38300
MIN	3160	3280	2580	1470	1680	14800	5320	2170	2050	1520	1550	1690

CAL YR 1976 TOTAL 3297620 MEAN 9010 MAX 79000 MIN 2040
WTR YR 1977 TOTAL 3138560 MEAN 8599 MAX 80000 MIN 1470

01446550 DELAWARE RIVER NEAR MARTINS CREEK, PA (ROXBURG, NJ)

LOCATION.--Lat 40°47'20", long 75°06'59", Northampton County, Hydrologic Unit 02040105, at Pennsylvania Railroad crossing, 900 ft (274 m) upstream from Oughoughton Creek, and 4.7 mi (7.5 km) east of Martins Creek.

DRAINAGE AREA.--4,546 mi² (11,774 km²), approximately.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1969 to current year.

REMARKS.--Operated as part of the USGS-EPA surveillance network. Records of discharge are given for 01446500, Delaware River at Belvidere, NJ.

COOPERATION.--Selected water-quality samples collected and analyzed by Pennsylvania Department of Environmental Resources.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLI-FORM ,TUM-MF (COL./ 100 ML)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
05...	1415	4500	130	7.4	17.5	1	9.9	10	65	58
20...	1130	5970	105	6.7	9.0	4	15.0	<10	16	189
NOV										
03...	1400	13210	70	7.1	7.0	3	12.6	10	48	90
16...	0900	6200	--	7.5	5.0	2	10.8	<10	36	140
DEC										
01...	1315	4200	105	7.7	4.0	4	14.0	<10	85	B14
14...	0900	7330	100	6.8	1.0	2	13.0	<10	44	77
27...	1600	2850	--	7.4	3.0	7	11.8	<10	--	--
JAN										
11...	1530	2490	120	7.0	3.0	1	13.5	<10	45	90
26...	1230	3100	120	7.1	3.0	2	13.6	<10	88	23
FEB										
08...	1500	3020	160	7.3	3.0	2	13.4	<10	10	21
23...	1120	2400	155	7.7	5.0	2	14.0	<10	2	70
MAR										
09...	1500	15600	85	6.3	5.5	2	12.8	<10	38	22
25...	1000	23900	95	6.6	2.5	3	13.6	10	--	--
APR										
07...	1445	29100	110	6.8	7.5	3	13.5	11	27	36
20...	1245	7720	105	7.3	10.0	1	10.4	<10	B19	76
MAY										
03...	1000	11000	80	7.9	10.0	2	10.0	7	B16	40
17...	1130	8500	70	7.6	22.0	1	10.0	5	15	89
31...	1600	2150	140	8.4	25.5	2	9.9	11	36	B16
JUN										
14...	1400	2420	130	7.9	25.0	1	8.1	14	94	B18
28...	1330	2120	127	7.9	27.5	1	8.4	12	84	39
JUL										
12...	1400	2600	130	7.3	28.0	1	7.6	5	73	22
27...	1400	1460	120	8.7	28.0	1	8.6	5	24	52
AUG										
09...	1230	2260	140	7.4	29.5	1	6.9	10	460	800
24...	1000	2220	120	8.0	25.0	1	7.8	10	21	680
SEP										
06...	1315	2030	120	7.4	28.5	1	7.6	15	E50	1400
20...	1445	3020	104	7.3	26.0	1	7.8	15	94	378

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
10...	--	--	--	--	1.1	--	--	--	9.5
NOV									
30...	--	--	--	--	1.7	--	--	--	3.6
JAN									
31...	--	--	--	--	1.8	--	.10	--	4.0
MAR									
14...	--	--	--	--	1.4	--	.05	--	7.1
APR									
12...	--	--	--	--	1.1	--	.04	--	2.0
MAY									
04...	--	--	--	--	1.1	--	.08	--	6.5
JUN									
08...	--	--	--	--	1.4	--	.06	--	6.3
JUL									
08...	.20	.01	.03	.44	.47	.68	.07	.06	5.1
AUG									
01...	.07	.01	.01	.28	.29	.37	.06	.04	5.4
17...	.15	.01	.01	.30	.39	.55	.13	.10	4.7
SEP									
19...	.61	.02	.02	.36	.38	1.0	.13	.10	7.6

01446550 DELAWARE RIVER NEAR MARTINS CREEK, PA (ROXBURG, NJ)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SUS-PENDED SOLIDS (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT										
05...	--	--	--	--	--	--	71	--	2	.22
20...	--	--	--	--	--	--	56	--	8	.35
NOV										
03...	--	--	--	--	--	--	48	--	16	.29
16...	--	--	--	--	--	--	104	--	1	3.4
DEC										
01...	38	0	31	1.2	12	5.7	57	0	3	.34
14...	--	--	--	--	--	--	63	--	1	.49
27...	--	--	--	--	--	--	71	--	5	.40
JAN										
11...	--	--	--	--	--	--	66	--	1	.42
26...	--	--	--	--	--	--	63	--	2	.39
FEB										
08...	--	--	--	--	--	--	66	--	2	.56
23...	--	--	--	--	--	--	80	--	2	.59
MAR										
09...	18	0	15	14	8.8	6.3	53	14	16	.54
25...	--	--	--	--	--	--	36	--	10	.44
APR										
07...	--	--	--	--	--	--	50	--	--	.41
20...	--	--	--	--	--	--	161	--	--	.46
MAY										
03...	--	--	--	--	--	--	54	--	--	.27
17...	--	--	--	--	--	--	50	--	9	.19
31...	--	--	--	--	--	--	88	--	--	.39
JUN										
14...	30	0	25	.6	15	7.2	78	0	--	.40
28...	--	--	--	--	--	--	80	--	--	.34
JUL										
12...	--	--	--	--	--	--	74	--	--	.44
27...	--	--	--	--	--	--	95	--	--	.25
AUG										
09...	--	--	--	--	--	--	78	--	--	.35
24...	--	--	--	--	--	--	63	--	3	.21
SEP										
06...	--	--	--	--	--	--	66	--	3	.31
20...	--	--	--	--	--	--	60	--	5	.34

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)
OCT									
05...	.03	.22	.25	.47	.04	3.9	--	.000	.000
20...	.06	.09	.15	.50	.05	4.9	--	.005	.000
NOV									
03...	.03	.27	.30	.59	.03	7.9	--	1.39	.477
16...	.03	.20	.23	3.6	.03	5.4	--	.000	.000
DEC									
01...	.01	.12	.13	.47	.02	3.9	--	.000	.000
14...	.00	.15	.15	.64	.03	4.6	--	.000	.000
27...	.01	.22	.23	.63	.02	6.0	--	.000	.000
JAN									
11...	.02	.22	.24	.66	.03	2.8	--	1.24	.000
26...	.01	.85	.86	1.3	.03	4.9	--	2.60	.000
FEB									
08...	.04	.18	.22	.78	.01	3.9	--	3.20	.000
23...	.03	.49	.52	1.1	.01	7.4	--	8.01	5.36
MAR									
09...	.28	.02	.30	.84	.04	3.5	--	--	--
25...	.02	.30	.32	.76	.04	1.8	--	--	--
APR									
07...	.06	.24	.30	.71	.02	3.2	0	--	--
20...	.05	.15	.20	.66	.08	2.8	--	--	--
MAY									
03...	.03	.27	.30	.57	.01	4.9	--	4.14	2.66
17...	.04	.25	.29	.48	.01	8.3	--	--	--
31...	.12	.40	.52	.91	.03	5.3	--	2.39	.000
JUN									
14...	.05	.34	.39	.79	.04	4.2	--	.000	.000
28...	.07	.36	.43	.77	.01	4.9	--	.768	.662
JUL									
12...	.07	.51	.58	1.0	.02	3.2	--	1.25	1.24
27...	.04	.13	.17	.42	.02	4.1	--	.000	.000
AUG									
09...	.16	.59	.75	1.1	.07	5.1	--	--	--
24...	.03	.10	.13	.34	.02	4.9	--	1.14	.338
SEP									
06...	.02	.30	.32	.63	.04	6.9	--	2.44	.245
20...	.03	.34	.37	.71	.03	12	--	.155	.000

01446700 DELAWARE RIVER AT EASTON, PA

LOCATION.--Lat 40°42'43", long 75°11'48", Northampton County, PA, Hydrologic Unit 02040105, on right bank 200 ft (61 m) upstream from city of Easton pumping station, and 1.2 mi (1.9 km) upstream from Bushkill Creek at Easton.

DRAINAGE AREA.--4,636 mi² (12,007 km²).

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1967 to current year.
SPECIFIC CONDUCTANCE: November 1967 to current year.
pH: November 1967 to current year.
WATER TEMPERATURES: October 1947 to September 1949, October 1957 to September 1958, October 1963 to September 1964, November 1967 to current year.
DISSOLVED OXYGEN: November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 157.84 ft (48.110 m) NGVD.

REMARKS.--Records good. Diurnal fluctuation at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack, Cannonsville, Pepacton, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River basin, reservoirs in) and smaller reservoirs. Diversion from Cannonsville, Pepacton, and Neversink Reservoirs (see Delaware River basin, diversions).

AVERAGE DISCHARGE.--10 years, 9,016 ft³/s (255.3 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 94,700 ft³/s (2,680 m³/s) Mar. 14, gage height, 24.95 ft (7.705 m); minimum, 1,690 ft³/s (47.9 m³/s) Jan. 31, Feb. 1, July 29, gage height, 3.68 ft (1.122 m); minimum daily, 1,820 ft (51.5 m) Jan. 31, Feb. 1.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, about 100,000 ft³/s (2,830 m³/s) Dec. 22, 1973; minimum, 1,640 ft³/s (46.4 m³/s) Aug. 16, 1971, gage height, 3.87 ft (1.180 m); minimum gage height, 3.68 ft (1.122 m) Jan. 31, Feb. 1, July 29, 1977.
SPECIFIC CONDUCTANCE: Maximum, 499 micromhos Nov. 26, 1970; minimum, 40 micromhos Apr. 6, 1970.
pH: Maximum, 9.8 May 16, 1970; minimum, 5.7 May 24, 1970.
WATER TEMPERATURES: Maximum, 30.0°C July 18, 1968, July 28-29, 1970; minimum, freezing point on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 18.1 mg/L Jan. 21, 1975; minimum, 4.8 mg/L July 9, 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4340	15300	4500	2600	1820	21800	44300	12400	2530	2950	2380	2600
2	4200	16700	4200	2800	2270	19200	35400	10900	2650	2960	2570	2500
3	3980	14100	4000	3200	2150	15400	38300	9920	2560	2800	3280	2600
4	4260	12900	3000	3600	1970	16700	38800	9030	2540	2120	3150	2400
5	4860	13100	3000	3800	1930	36200	35000	8960	2450	2480	2740	2200
6	4420	12800	2800	3630	2210	39700	36900	12000	2730	2480	2620	2270
7	4000	11700	3000	3110	2700	29700	32500	14200	2850	2850	2510	2320
8	3540	10700	15000	3070	3110	22500	27800	11900	2860	3140	2380	2790
9	6370	10700	13000	3350	3790	18200	23600	10300	2880	2950	2740	2470
10	36500	9990	11000	3430	3760	16000	20600	11000	3310	2930	3180	2330
11	38000	9190	9000	2730	3100	16700	18400	12000	3350	2440	2790	2390
12	26200	8840	7800	3450	3210	18500	16800	11400	3330	2390	2560	1990
13	18200	8200	7000	3430	3300	22700	14800	11400	3360	2890	2530	2000
14	12800	7700	6000	3620	3550	67600	13500	11000	3150	2950	2340	2380
15	10600	7200	5400	4020	3350	77600	12300	10200	3050	2940	2260	2210
16	9670	6800	5200	3530	3340	49100	11300	9160	2890	3140	2390	2160
17	8020	6400	4900	2490	3930	36600	9550	8810	2720	2490	2700	2910
18	7170	5900	4700	2350	4100	28800	8260	7390	2730	2750	2840	3590
19	7200	5500	4500	3670	3630	24600	8230	7240	2940	2770	2520	4980
20	6680	5330	4100	3580	3190	21500	7780	6940	3040	3750	2370	3900
21	11400	5110	3800	3620	2990	17600	7280	6000	3150	3500	2640	4460
22	32500	5020	4000	3320	2890	20500	6560	5500	3150	3710	2360	11000
23	25200	4750	3300	3190	2860	40400	6110	5000	3040	3060	2280	8090
24	18500	4620	3700	3100	4010	32100	7590	4500	3000	2010	2650	6630
25	16100	4430	3300	2880	13900	25500	15400	4300	3020	2160	3000	6990
26	18300	4180	2600	3350	16400	21400	25100	4000	3130	2260	2800	25100
27	20100	3960	2900	3110	19900	18000	22200	3500	3040	2030	2500	36700
28	17200	3860	2700	2710	20800	16900	20200	2950	2580	1890	2000	27900
29	14700	3740	2400	2690	---	18800	17200	2800	3040	2000	2000	16800
30	13200	3900	2700	2330	---	27600	14700	2590	3020	2360	2500	12200
31	13000	---	2500	1820	---	43400	---	2510	---	2390	3000	---
TOTAL	421210	242620	156000	97580	144160	881300	596460	249800	88090	83540	80580	208860
MEAN	13590	8087	5032	3148	5149	28430	19880	8058	2936	2695	2599	6962
MAX	38000	16700	15000	4020	20800	77600	44300	14200	3360	3750	3280	36700
MIN	3540	3740	2400	1820	1820	15400	6110	2510	2450	1890	2000	1990

CAL YR 1976 TOTAL 3463700 MEAN 9464 MAX 75700 MIN 2400
WTR YR 1977 TOTAL 3250200 MEAN 8905 MAX 77600 MIN 1820

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	132	127	130	126	107	115	164	145	154	154	137	144
2	138	131	135	182	126	156	158	153	155	149	137	144
3	146	128	140	221	183	207	176	156	166	---	---	---
4	151	143	146	245	208	221	168	159	163	154	142	149
5	147	132	140	255	168	203	173	162	170	141	132	137
6	141	133	136	188	168	178	182	172	177	143	132	138
7	138	134	136	196	186	191	198	153	176	148	140	144
8	147	135	141	235	146	186	236	173	198	155	134	145
9	167	142	155	167	148	158	279	201	221	147	132	139
10	---	---	---	175	155	162	229	185	208	145	127	136
11	---	---	---	167	155	163	217	193	200	161	138	149
12	---	---	---	161	151	157	204	173	189	151	130	142
13	---	---	---	176	153	160	---	---	---	152	126	139
14	---	---	---	163	153	159	123	114	117	147	127	135
15	---	---	---	165	157	162	126	114	120	138	122	128
16	---	---	---	170	155	161	127	116	121	144	128	136
17	---	---	---	165	154	161	126	120	123	356	144	172
18	---	---	---	167	155	161	125	117	120	172	149	161
19	---	---	---	171	163	166	129	121	125	151	130	141
20	145	126	138	175	168	171	130	125	128	146	131	137
21	145	130	138	175	163	168	137	127	131	140	128	134
22	---	---	---	167	160	163	145	129	137	139	131	135
23	---	---	---	168	156	163	133	122	128	143	125	135
24	---	---	---	165	153	160	137	122	130	146	126	136
25	---	---	---	164	157	160	140	123	133	144	135	140
26	---	---	---	169	163	165	140	131	135	138	132	135
27	---	---	---	172	163	167	144	132	140	144	133	137
28	---	---	---	178	163	174	149	142	146	149	133	143
29	---	---	---	182	174	177	145	137	141	152	134	143
30	---	---	---	185	157	167	144	136	140	156	145	150
31	---	---	---	---	---	---	142	134	137	171	155	166
MONTH	167	126	140	255	107	169	279	114	151	356	122	142

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	172	166	169							---	---	---
2	172	155	162							---	---	---
3	163	159	161							---	---	---
4	169	160	163							---	---	---
5	173	168	171							---	---	---
6	173	158	167							---	---	---
7	161	138	150							---	---	---
8	142	129	136							---	---	---
9	131	122	126							---	---	---
10	131	121	125							---	---	---
11	134	131	132							---	---	---
12	142	131	137							---	---	---
13	167	141	152							---	---	---
14	168	158	161							---	---	---
15	171	159	168							---	---	---
16	170	161	166							---	---	---
17	168	141	150							---	---	---
18	162	132	145							---	---	---
19	173	142	154							---	---	---
20	167	155	160							---	---	---
21	165	156	160							---	---	---
22	165	158	163							---	---	---
23	185	158	166							---	---	---
24	169	166	167							---	---	---
25	---	---	---							---	---	---
26	---	---	---							---	---	---
27	---	---	---							136	124	127
28	---	---	---							145	134	137
29	---	---	---							153	142	146
30	---	---	---							154	149	151
31	---	---	---							158	152	155
MONTH	185	121	155							158	124	143

01446700 DELAWARE RIVER AT EASTON, PA (PHILLIPSBURG, NJ)--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	167	157	161	138	132	135	137	134	135	132	130	131
2	165	160	163	138	135	136	138	130	133	133	130	131
3	168	164	165	---	---	---	134	120	126	134	130	131
4	---	---	---	---	---	---	127	119	122	134	128	130
5	---	---	---	---	---	---	134	123	127	131	128	130
6	---	---	---	---	---	---	134	123	128	134	131	133
7	165	155	159	---	---	---	138	127	131	134	130	131
8	158	155	156	---	---	---	143	135	138	130	122	125
9	160	153	156	---	---	---	154	134	138	126	124	125
10	159	150	154	---	---	---	146	122	129	128	126	127
11	150	123	136	---	---	---	132	125	128	130	125	127
12	126	121	123	145	138	141	134	129	132	134	127	132
13	132	123	126	142	134	137	138	131	134	140	132	135
14	146	131	138	138	131	135	140	138	139	141	131	136
15	147	141	145	130	125	129	144	141	143	133	129	131
16	146	138	141	130	121	125	141	137	139	135	128	132
17	148	143	146	133	123	126	138	129	132	144	124	133
18	149	141	145	135	125	131	137	129	132	131	120	128
19	146	137	141	132	125	128	140	132	136	118	102	106
20	141	133	137	128	115	120	142	140	141	116	105	111
21	143	137	140	118	112	115	142	134	137	117	111	115
22	139	130	134	118	112	115	138	133	136	111	90	95
23	133	125	129	120	108	112	143	138	141	97	91	93
24	135	130	133	132	121	125	139	134	136	101	92	95
25	146	131	136	141	133	138	134	128	130	124	103	115
26	148	136	140	138	134	136	134	129	131	125	90	102
27	144	139	142	141	134	137	133	128	130	103	80	86
28	148	140	143	145	140	143	139	132	134	90	80	85
29	150	141	145	151	145	148	145	139	143	96	84	88
30	144	133	137	148	134	139	145	142	143	98	90	95
31	---	---	---	139	138	139	143	128	132	---	---	---
MONTH	168	121	143	151	108	131	154	119	134	144	80	118
YEAR	356	80	143									

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.7	7.4	7.5	7.4	7.2	7.3	8.2	7.5	7.8	8.4	7.4	7.8
2	8.0	7.4	7.6	7.2	7.2	7.2	7.9	7.4	7.6	8.5	7.4	7.8
3	7.9	7.5	7.6	7.2	7.2	7.2	8.0	7.5	7.7	---	---	---
4	8.2	7.5	7.8	7.2	7.2	7.2	8.0	7.5	7.7	8.3	7.6	8.0
5	8.0	7.5	7.7	7.2	7.2	7.2	8.1	7.5	7.7	8.3	7.5	7.8
6	7.8	7.4	7.6	7.2	7.2	7.2	8.3	7.5	7.8	8.3	7.4	7.7
7	7.9	7.4	7.6	7.3	7.2	7.2	7.7	7.4	7.5	8.3	7.4	7.7
8	7.8	7.4	7.6	7.3	7.2	7.3	7.5	7.3	7.3	8.7	7.4	7.8
9	7.5	7.4	7.4	7.3	7.3	7.3	7.3	7.3	7.3	8.4	7.4	7.7
10	---	---	---	7.3	7.3	7.3	7.3	7.2	7.3	7.9	7.4	7.5
11	---	---	---	7.3	7.3	7.3	7.3	7.3	7.3	8.6	7.3	7.7
12	---	---	---	7.3	7.3	7.3	7.5	7.3	7.3	8.7	7.5	7.9
13	---	---	---	7.4	7.3	7.3	7.3	7.3	7.3	8.7	7.3	7.8
14	---	---	---	7.4	7.3	7.3	7.4	7.3	7.3	8.3	7.3	7.6
15	---	---	---	7.4	7.3	7.4	7.5	7.2	7.3	8.4	7.3	7.7
16	---	---	---	7.4	7.3	7.4	7.4	7.2	7.3	8.5	7.3	7.7
17	---	---	---	7.4	7.4	7.4	7.4	7.2	7.3	8.4	7.1	7.6
18	---	---	---	7.4	7.3	7.4	7.5	7.2	7.3	8.6	7.4	7.8
19	---	---	---	7.4	7.4	7.4	7.5	7.3	7.4	8.6	7.4	7.8
20	7.5	7.3	7.4	7.5	7.4	7.4	7.6	7.3	7.4	8.5	7.3	7.7
21	7.4	7.3	7.4	7.5	7.4	7.5	7.8	7.3	7.5	8.6	7.0	7.8
22	---	---	---	7.6	7.4	7.5	7.9	7.3	7.5	8.7	7.4	7.8
23	---	---	---	[illegible]	7.4	7.5	7.9	7.3	7.5	8.8	7.4	7.9
24	---	---	---	[illegible]	7.4	7.5	7.8	7.3	7.5	8.8	7.3	7.9
25	---	---	---	7.7	7.4	7.5	7.8	7.3	7.5	8.6	7.3	7.8
26	---	---	---	7.7	7.4	7.5	8.1	7.3	7.6	8.7	7.5	7.9
27	---	---	---	7.8	7.4	7.6	8.2	7.4	7.7	8.7	7.5	7.9
28	---	---	---	7.8	7.4	7.5	8.1	7.4	7.6	9.1	7.4	8.0
29	---	---	---	7.8	7.4	7.6	8.3	7.5	7.8	8.9	7.5	8.1
30	---	---	---	8.3	7.5	7.8	8.3	7.4	7.8	8.8	7.5	8.0
31	---	---	---	---	---	---	8.3	7.4	7.7	8.7	7.5	8.0
MONTH	8.2	7.3	7.6	8.3	7.2	7.4	8.3	7.2	7.5	9.1	7.0	7.8

01446700 DELAWARE RIVER AT EASTON, PA (PHILLIPSBURG, NJ)--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.1	7.6	8.2							---	---	---
2	9.1	7.5	8.3							---	---	---
3	8.7	7.6	8.0							---	---	---
4	8.9	7.5	8.1							---	---	---
5	8.9	7.6	8.2							---	---	---
6	9.0	7.7	8.3							---	---	---
7	9.0	7.7	8.2							---	---	---
8	8.8	7.6	8.1							---	---	---
9	8.4	7.5	7.9							---	---	---
10	8.4	7.4	7.8							---	---	---
11	8.6	7.4	7.9							---	---	---
12	8.6	7.5	7.9							---	---	---
13	8.3	7.4	7.8							---	---	---
14	8.2	7.5	7.8							---	---	---
15	8.0	7.5	7.6							---	---	---
16	8.4	7.4	7.9							---	---	---
17	8.5	7.4	7.9							---	---	---
18	8.4	7.5	7.8							---	---	---
19	8.2	7.4	7.7							---	---	---
20	7.8	7.4	7.6							---	---	---
21	8.5	7.5	7.9							---	---	---
22	8.6	7.6	7.9							---	---	---
23	8.4	7.5	7.8							---	---	---
24	7.7	7.5	7.6							---	---	---
25	---	---	---							---	---	---
26	---	---	---							---	---	---
27	---	---	---							8.6	8.1	8.4
28	---	---	---							8.7	7.6	8.3
29	---	---	---							8.7	7.6	8.2
30	---	---	---							8.4	7.5	8.0
31	---	---	---							8.5	7.4	8.0
MONTH	9.1	7.4	7.9							8.7	7.4	8.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.9	7.5	7.6	8.4	7.4	8.0	7.8	7.4	7.6	8.1	7.0	7.4
2	7.6	7.3	7.4	7.9	7.5	7.7	8.3	7.1	7.7	8.1	7.0	7.5
3	7.3	7.1	7.2	---	---	---	7.7	7.1	7.3	8.2	7.0	7.6
4	---	---	---	---	---	---	7.9	7.0	7.4	8.4	7.1	7.7
5	---	---	---	---	---	---	8.0	7.1	7.5	8.2	7.1	7.6
6	---	---	---	---	---	---	8.2	7.1	7.6	8.3	7.1	7.6
7	8.4	7.5	8.1	7.5	7.2	7.3	8.1	7.1	7.6	8.4	7.1	7.7
8	8.6	7.5	8.1	7.2	6.9	7.1	8.4	7.2	7.8	8.1	7.1	7.6
9	8.1	7.5	7.7	7.3	6.9	7.1	8.4	7.3	7.8	8.3	7.1	7.7
10	8.0	7.3	7.6	7.5	7.2	7.3	---	---	---	8.4	7.1	7.7
11	7.9	7.4	7.6	7.9	7.6	7.8	---	---	---	8.3	7.2	7.7
12	8.2	7.3	7.7	8.4	7.7	8.0	8.3	7.5	8.0	8.5	7.2	7.8
13	8.6	7.3	7.8	8.5	7.2	7.8	7.6	7.1	7.3	8.2	7.2	7.7
14	8.2	7.3	7.8	8.7	7.3	8.0	7.9	7.1	7.4	8.1	7.2	7.6
15	8.6	7.3	7.9	8.7	7.3	8.1	8.3	7.1	7.7	8.3	7.2	7.7
16	8.8	7.5	8.2	8.7	7.3	8.1	8.2	7.2	7.6	7.5	7.2	7.4
17	8.8	7.6	8.3	8.7	7.2	8.0	8.0	7.2	7.5	8.0	7.1	7.4
18	8.8	7.5	8.2	8.6	7.1	7.9	8.4	7.2	7.7	8.1	7.1	7.5
19	8.9	7.6	8.4	8.6	7.1	7.9	8.4	7.2	7.9	7.8	7.0	7.3
20	8.9	7.7	8.4	8.1	7.0	7.5	8.6	7.3	8.0	7.5	6.9	7.2
21	8.5	7.7	8.1	8.5	7.0	7.7	8.7	7.4	8.1	7.6	7.0	7.2
22	8.7	7.5	8.1	8.5	7.1	7.8	8.5	7.4	8.0	7.1	6.8	6.9
23	8.8	7.6	8.3	8.5	7.1	7.8	8.6	7.3	8.0	6.9	6.8	6.8
24	8.8	7.6	8.3	8.6	7.1	7.9	8.3	7.4	7.9	6.9	6.8	6.8
25	8.3	7.5	7.8	7.9	7.1	7.4	8.5	7.2	7.9	7.1	6.9	7.0
26	7.9	7.4	7.6	8.3	7.1	7.7	8.7	7.3	8.1	7.0	6.7	6.9
27	8.4	7.3	7.9	8.4	7.2	7.8	8.6	7.4	8.1	6.8	6.5	6.7
28	8.3	7.4	7.8	8.5	7.3	8.0	8.8	7.2	8.1	6.8	6.6	6.7
29	8.3	7.3	7.7	8.6	7.3	8.0	8.7	7.3	8.1	6.9	6.7	6.8
30	8.6	7.3	8.0	8.4	7.3	7.9	8.7	7.3	8.1	7.3	6.8	6.9
31	---	---	---	7.8	7.6	7.7	8.1	7.2	7.5	---	---	---
MONTH	8.9	7.1	7.9	8.7	6.9	7.8	8.8	7.0	7.8	8.5	6.5	7.3
YEAR	9.1	6.5	7.7									

01446700 DELAWARE RIVER AT EASTON, PA (PHILLIPSBURG, NJ)--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	15.0	15.5	8.5	8.0	8.5	4.5	3.5	4.0	2.0	1.0	1.5
2	15.5	15.0	15.5	8.5	7.5	8.5	4.0	3.0	3.5	2.5	1.5	2.0
3	15.5	15.0	15.0	9.0	8.5	9.0	3.0	2.0	2.5	---	---	---
4	16.0	15.0	15.5	9.5	8.5	9.0	2.0	2.0	2.0	4.0	3.5	3.5
5	16.0	15.5	16.0	9.5	8.5	9.0	3.0	2.0	2.5	3.5	2.5	3.0
6	16.5	15.5	16.0	8.5	7.5	8.0	4.0	2.0	3.0	3.0	2.0	2.5
7	17.0	16.0	16.5	8.0	7.5	8.0	5.0	3.5	4.5	3.5	2.0	2.5
8	17.5	16.5	17.0	8.0	6.0	7.0	4.0	2.5	3.5	2.0	1.5	1.5
9	18.5	17.5	18.0	6.0	5.5	6.0	5.5	3.0	3.5	2.0	1.0	1.5
10	---	---	---	6.0	5.5	6.0	4.5	4.0	4.0	2.0	1.0	1.5
11	---	---	---	6.0	6.0	6.0	5.0	4.5	5.0	2.0	1.5	1.5
12	---	---	---	6.0	5.5	6.0	5.5	5.0	5.0	2.0	1.5	1.5
13	---	---	---	5.5	5.0	5.5	5.5	5.0	5.5	2.0	1.5	1.5
14	---	---	---	5.5	4.5	5.0	2.0	1.5	1.5	2.0	2.0	2.0
15	---	---	---	5.5	4.5	5.0	3.0	1.5	2.0	3.0	2.0	2.5
16	---	---	---	5.0	4.5	5.0	3.0	2.5	2.5	2.0	1.5	2.0
17	---	---	---	5.0	4.0	4.5	3.0	2.5	2.5	5.5	1.5	2.0
18	---	---	---	6.0	4.5	5.5	3.0	2.0	2.5	1.5	1.5	1.5
19	---	---	---	6.5	5.5	6.0	3.0	2.0	2.5	2.0	1.0	1.5
20	10.5	10.0	10.5	6.5	6.0	6.0	3.5	2.5	3.0	3.0	2.0	2.5
21	10.5	10.5	10.5	6.5	5.5	6.0	3.5	2.0	3.0	2.5	1.5	2.0
22	---	---	---	6.0	5.5	5.5	2.0	1.5	2.0	2.5	1.5	2.0
23	---	---	---	5.0	5.0	5.0	3.0	1.5	2.0	3.0	1.5	2.5
24	---	---	---	5.0	4.5	4.5	3.0	2.0	2.0	3.5	2.0	3.0
25	---	---	---	5.0	4.5	4.5	2.5	2.0	2.0	4.0	3.0	3.5
26	---	---	---	5.5	4.5	5.0	3.0	2.0	2.5	3.5	2.5	3.0
27	---	---	---	6.0	5.5	6.0	2.5	1.5	2.0	3.5	2.0	3.0
28	---	---	---	7.5	6.0	6.5	2.0	1.5	2.0	3.5	2.0	2.5
29	---	---	---	7.5	6.0	7.0	3.0	2.0	2.0	2.0	1.5	1.5
30	---	---	---	6.0	4.5	5.0	1.5	1.0	1.5	2.0	1.5	1.5
31	---	---	---	---	---	---	2.0	1.0	1.5	2.5	1.5	2.0
MONTH	18.5	10.0	15.0	9.5	4.0	6.5	5.5	1.0	3.0	5.5	1.0	2.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	2.0	2.5							---	---	---
2	4.0	3.0	3.5							---	---	---
3	4.0	3.5	4.0							---	---	---
4	5.0	4.0	4.5							---	---	---
5	5.0	3.0	4.5							---	---	---
6	3.5	2.0	2.5							---	---	---
7	3.5	1.5	2.5							---	---	---
8	4.0	2.5	3.0							---	---	---
9	2.5	2.0	2.5							---	---	---
10	3.5	2.5	3.0							---	---	---
11	5.0	3.0	4.0							---	---	---
12	5.5	4.0	4.5							---	---	---
13	5.5	4.5	5.0							---	---	---
14	4.5	4.0	4.0							---	---	---
15	4.5	3.5	4.0							---	---	---
16	4.0	3.0	3.5							---	---	---
17	3.0	2.0	2.5							---	---	---
18	3.5	2.0	3.0							---	---	---
19	4.0	3.5	3.5							---	---	---
20	3.5	3.0	3.5							---	---	---
21	4.0	2.0	3.0							---	---	---
22	4.0	2.0	3.0							---	---	---
23	5.5	3.5	4.5							---	---	---
24	5.0	4.5	4.5							---	---	---
25	---	---	---							---	---	---
26	---	---	---							---	---	---
27	---	---	---							25.5	23.5	24.5
28	---	---	---							25.5	23.5	24.5
29	---	---	---							25.0	23.5	24.5
30	---	---	---							24.5	23.0	24.0
31	---	---	---							24.5	22.5	24.0
MONTH	5.5	1.5	3.5							25.5	22.5	24.5

01446700 DELAWARE RIVER AT EASTON, PA (PHILLIPSBURG, NJ)--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	23.0	23.5	27.5	26.5	27.0	27.5	27.0	27.0	27.5	26.0	27.0
2	25.5	23.5	24.5	27.0	26.5	27.0	28.5	26.0	27.5	28.5	26.5	27.5
3	25.0	24.0	24.5	---	---	---	27.5	26.0	26.5	28.5	26.5	27.5
4	---	---	---	---	---	---	27.5	26.0	26.5	28.0	26.0	27.0
5	---	---	---	---	---	---	28.0	26.0	27.0	27.0	26.0	26.5
6	---	---	---	---	---	---	28.5	27.0	28.0	27.0	26.0	26.5
7	22.5	21.5	22.0	27.5	26.0	26.5	29.0	27.5	28.0	27.0	26.0	26.5
8	22.0	20.5	21.5	28.5	25.5	26.5	30.0	28.0	29.0	26.0	25.0	25.5
9	21.5	20.0	20.5	29.0	28.0	28.5	30.5	28.5	29.5	25.5	24.0	25.0
10	20.0	18.5	19.5	29.0	27.5	28.5	29.0	28.0	28.5	26.0	24.5	25.0
11	19.5	18.0	18.5	29.0	27.5	28.0	29.5	27.5	28.5	25.0	23.0	24.0
12	20.5	18.5	19.5	29.0	27.0	28.5	29.0	28.0	28.5	23.5	21.5	22.5
13	23.5	20.0	21.5	29.5	27.5	28.5	28.0	27.0	27.5	22.5	22.0	22.5
14	23.5	22.5	23.0	30.5	28.0	29.5	27.0	26.5	27.0	23.5	22.5	22.5
15	25.0	23.0	24.0	31.0	28.5	30.0	28.5	26.0	27.0	22.5	21.5	22.0
16	25.5	23.5	24.5	31.0	29.0	30.0	27.0	26.0	26.5	21.5	21.0	21.0
17	25.5	24.0	24.5	32.0	29.5	31.0	27.0	26.0	26.5	23.0	21.0	22.0
18	25.5	24.0	24.5	32.5	30.0	31.5	26.5	25.0	26.0	23.0	21.5	22.0
19	26.5	24.5	25.5	32.5	30.5	31.5	26.0	24.0	25.0	23.5	22.5	23.0
20	27.0	25.0	26.0	31.5	30.0	31.0	26.0	23.5	25.0	24.0	23.0	23.5
21	25.5	24.5	25.0	32.0	30.0	31.0	24.5	23.5	24.0	23.0	21.5	22.0
22	25.0	23.5	24.5	31.0	30.0	30.5	25.0	23.5	24.0	21.5	19.0	20.0
23	26.0	24.0	25.0	30.0	28.0	29.0	25.0	23.5	24.5	19.0	18.5	18.5
24	26.0	24.5	25.0	30.0	27.5	28.5	24.5	24.0	24.5	18.5	18.0	18.0
25	25.0	23.0	24.5	28.5	27.0	28.0	25.0	22.5	23.5	18.0	17.0	17.0
26	24.5	22.5	23.5	28.0	26.0	27.0	25.0	22.5	23.5	17.0	15.0	15.5
27	26.5	23.5	25.0	27.0	25.0	26.0	25.0	23.5	24.5	15.0	14.5	15.0
28	26.5	25.0	26.0	27.0	24.5	25.5	27.0	24.0	25.5	16.5	15.0	15.5
29	27.5	25.5	26.5	27.0	24.5	26.0	28.0	26.0	27.0	16.5	15.5	16.0
30	28.0	25.5	26.5	27.0	25.5	26.5	28.5	26.5	27.5	17.5	16.0	16.5
31	---	---	---	26.5	26.5	26.5	27.5	26.5	27.0	---	---	---
MONTH	28.0	18.0	23.5	32.5	24.5	28.5	30.5	22.5	26.5	28.5	14.5	22.0
YEAR	32.5	1.0	14.5									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.3	10.5	10.9	---	---	---	14.2	12.4	13.3	14.5	12.7	13.6
2	11.8	10.6	11.1	---	---	---	14.0	13.2	13.5	14.8	12.8	13.7
3	11.7	10.7	11.1	---	---	---	14.5	13.0	13.7	---	---	---
4	12.0	10.7	11.3	---	---	---	14.7	13.4	14.0	14.4	13.3	13.9
5	11.9	10.7	11.2	---	---	---	14.8	13.5	14.1	14.6	13.0	13.7
6	11.4	10.6	10.9	---	---	---	14.7	13.3	13.9	14.6	13.0	13.6
7	10.7	9.8	10.3	---	---	---	---	---	---	14.4	12.6	13.3
8	10.3	9.4	9.8	---	---	---	---	---	---	15.0	12.6	13.6
9	9.5	8.0	9.0	---	---	---	---	---	---	14.8	13.0	13.7
10	---	---	---	---	---	---	---	---	---	13.8	12.7	13.2
11	---	---	---	---	---	---	---	---	---	14.8	12.3	13.3
12	---	---	---	---	---	---	---	---	---	15.3	13.1	13.9
13	---	---	---	13.3	12.8	13.1	---	---	---	15.4	13.0	13.9
14	---	---	---	13.4	13.0	13.1	14.9	14.4	14.7	14.7	13.0	13.7
15	---	---	---	13.4	12.9	13.1	15.1	14.1	14.5	14.8	12.9	13.7
16	---	---	---	13.7	12.9	13.3	14.8	14.0	14.3	14.9	12.8	13.6
17	---	---	---	13.9	13.3	13.5	14.4	13.6	14.0	14.6	9.7	13.3
18	---	---	---	13.7	13.1	13.4	14.5	13.5	14.0	14.9	12.7	13.6
19	---	---	---	---	---	---	14.7	13.7	14.1	14.9	12.9	13.6
20	11.3	10.9	11.1	---	---	---	14.5	13.6	13.9	14.6	12.5	13.4
21	11.1	10.7	10.9	---	---	---	14.4	13.2	13.7	14.7	12.6	13.5
22	---	---	---	---	---	---	15.0	13.3	14.1	14.6	12.6	13.5
23	---	---	---	---	---	---	15.4	13.7	14.6	15.1	12.6	13.6
24	---	---	---	14.5	13.6	14.1	15.4	14.1	14.7	15.1	12.5	13.6
25	---	---	---	14.4	13.6	14.0	15.3	14.2	14.7	14.5	12.4	13.4
26	---	---	---	14.5	13.5	14.0	15.5	14.1	14.7	14.7	12.5	13.4
27	---	---	---	14.5	13.3	13.8	15.1	13.1	14.0	14.6	12.4	13.4
28	---	---	---	14.1	12.9	13.4	14.8	12.7	13.2	14.9	12.2	13.3
29	---	---	---	13.8	12.5	13.0	14.3	12.8	13.4	14.8	12.2	13.4
30	---	---	---	13.9	12.6	13.1	14.4	12.8	13.6	14.8	12.4	13.5
31	---	---	---	---	---	---	14.3	13.8	13.6	14.6	12.2	13.4
MONTH	12.0	8.0	10.7	14.5	12.5	13.5	15.5	12.4	14.8	15.4	9.7	13.5

01446700 DELAWARE RIVER AT EASTON, PA (PHILLIPSBURG, NJ)--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.9	12.3	13.5							---	---	---
2	15.9	12.3	13.9							---	---	---
3	14.9	12.5	13.5							---	---	---
4	15.4	12.4	13.6							---	---	---
5	15.0	12.0	13.4							---	---	---
6	15.6	12.5	14.0							---	---	---
7	15.6	13.2	14.2							---	---	---
8	15.4	13.0	14.1							---	---	---
9	15.2	13.4	14.2							---	---	---
10	15.0	13.2	14.0							---	---	---
11	15.1	12.9	13.9							---	---	---
12	15.0	12.7	13.7							---	---	---
13	14.7	12.5	13.5							---	---	---
14	14.8	12.6	13.6							---	---	---
15	14.5	12.5	13.3							---	---	---
16	14.4	12.2	13.2							---	---	---
17	14.3	12.5	13.3							---	---	---
18	14.2	12.5	13.2							---	---	---
19	14.0	12.3	13.1							---	---	---
20	13.3	12.0	12.6							---	---	---
21	14.1	12.0	13.0							---	---	---
22	14.4	12.2	13.2							---	---	---
23	14.1	12.2	13.1							---	---	---
24	12.6	12.0	12.2							---	---	---
25	---	---	---							---	---	---
26	---	---	---							---	---	---
27	---	---	---							10.1	7.1	9.3
28	---	---	---							7.7	6.0	6.7
29	---	---	---							8.3	5.9	6.9
30	---	---	---							7.8	6.9	7.3
31	---	---	---							8.6	6.6	7.6
MONTH	15.9	12.0	13.5							10.1	5.9	7.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.1	6.1	6.4	8.8	6.7	7.8	8.2	7.4	7.8	9.1	7.0	7.9
2	---	---	---	7.3	6.8	7.1	9.1	7.0	8.0	9.1	7.1	7.9
3	---	---	---	---	---	---	7.8	7.0	7.4	9.2	6.9	8.0
4	---	---	---	---	---	---	8.7	7.1	7.8	9.4	7.1	8.2
5	---	---	---	---	---	---	8.8	7.3	8.0	9.2	7.1	8.0
6	---	---	---	---	---	---	8.9	7.1	7.9	8.8	7.1	7.8
7	9.4	8.1	8.8	---	---	---	8.5	6.8	7.5	9.0	6.7	7.8
8	10.0	7.6	8.9	---	---	---	8.3	6.4	7.3	8.7	7.0	7.8
9	8.8	7.6	8.2	---	---	---	8.9	6.0	7.4	9.0	7.2	8.0
10	9.4	7.7	8.6	---	---	---	---	---	---	9.0	7.0	7.9
11	9.4	8.3	8.9	---	---	---	---	---	---	9.0	7.1	8.0
12	9.6	8.4	9.0	8.8	7.3	8.2	9.3	7.6	8.5	9.8	7.5	8.6
13	9.8	8.0	8.8	9.2	6.6	7.8	8.3	7.1	7.6	9.3	7.6	8.3
14	9.4	7.6	8.4	9.4	6.5	7.9	8.8	7.1	7.8	9.0	7.5	8.1
15	9.9	7.3	8.6	9.4	6.4	7.9	9.4	7.2	8.3	9.6	7.6	8.5
16	10.4	7.4	8.9	9.3	6.3	7.7	9.2	7.3	8.1	8.7	7.9	8.3
17	10.0	7.4	8.6	8.8	5.9	7.3	8.9	7.5	8.1	9.2	7.7	8.4
18	10.1	7.2	8.7	8.1	5.4	6.7	9.6	7.7	8.6	9.3	7.8	8.5
19	10.1	7.6	8.6	7.7	5.2	6.4	9.9	7.9	8.9	8.7	7.6	8.1
20	9.8	6.8	8.3	---	---	---	10.4	8.0	9.2	8.4	7.4	7.8
21	8.8	6.7	7.8	9.5	7.5	8.5	10.6	8.0	9.3	8.8	7.6	8.1
22	9.8	7.1	8.6	8.9	6.5	7.7	10.2	8.0	9.0	8.4	8.1	8.2
23	10.2	7.4	8.8	9.0	6.6	7.8	10.7	7.9	9.2	8.6	8.3	8.5
24	9.9	7.2	8.6	8.7	6.3	7.4	9.5	7.8	8.6	8.7	8.5	8.6
25	8.2	7.0	7.6	8.6	5.7	7.0	10.5	8.0	9.2	8.8	8.6	8.7
26	8.5	7.0	7.8	9.7	7.2	8.4	10.7	8.2	9.5	9.4	8.8	9.1
27	9.1	7.2	8.1	10.2	7.6	8.9	10.3	8.1	9.2	9.6	8.8	9.4
28	8.5	6.7	7.5	9.9	7.9	8.8	11.0	7.9	9.3	9.4	9.1	9.3
29	8.1	6.3	7.2	9.8	7.3	8.6	10.6	7.3	8.8	9.4	9.1	9.3
30	9.6	6.1	7.7	9.1	7.0	8.0	10.4	7.1	8.7	9.6	9.2	9.4
31	---	---	---	7.7	7.4	7.6	8.3	7.1	7.7	---	---	---
MONTH	10.4	6.1	8.3	10.2	5.2	7.8	11.0	6.0	8.4	9.8	6.7	8.4
YEAR	15.9	5.2	10.7									

01447000 DELAWARE RIVER AT NORTHAMPTON STREET AT EASTON, PA

LOCATION.--Lat 40°41'30", long 75°12'15", Northampton County, Hydrologic Unit 02040105, at bridge on Northampton Street, 0.1 mi (0.2 km) upstream from Lehigh River, and 0.2 mi (0.3 km) downstream from U.S. Route 22 toll bridge at Easton.

DRAINAGE AREA.--4,717 mi² (12,217 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 04...	1030	86	9.3	7.5	2	10.4	<.5	80	23
FEB 23...	1015	163	7.5	7.0	2	10.1	1.0	60	5
MAR 21...	1115	104	7.1	4.0	1	10.2	--	<20	5
APR 14...	1015	117	7.5	12.5	2	10.2	<.5	130	4
MAY 11...	1015	87	7.7	12.0	1	10.2	2.0	20	17
JUN 13...	1020	128	8.0	20.0	3	4.5	--	50	13
JUL 13...	1150	138	7.9	26.5	1	3.4	1.0	700	14
AUG 09...	1145	134	--	26.5	1	6.1	1.0	3500	540

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 04...	34	9.6	2.4	4.8	1.1	12	4.9	39	13
FEB 23...	50	14	3.6	8.0	1.3	17	13	90	1
MAR 21...	39	11	2.7	4.0	1.1	13	7.0	55	9
APR 14...	99	33	4.1	5.2	1.1	14	8.5	68	2
MAY 11...	33	9.1	2.4	3.3	.8	12	5.1	50	5
JUN 13...	44	12	3.5	5.4	1.1	14	7.9	75	1
JUL 13...	47	13	3.6	5.4	1.1	12	6.8	109	14
AUG 09...	46	13	3.4	5.9	1.5	15	8.0	82	4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 04...	--	--	--	--	1.1	--	--	--	3.0
FEB 23...	--	--	--	--	1.1	--	.05	--	3.4
MAR 21...	--	--	--	--	1.1	--	.05	--	1.9
APR 14...	--	--	--	--	1.1	--	.02	--	6.2
MAY 11...	--	--	--	--	1.4	--	.00	--	2.7
JUN 13...	--	--	--	--	1.3	--	.02	--	5.2
JUL 13...	.51	.01	.05	.08	.13	.65	.04	.02	4.2
AUG 09...	.43	.01	.05	.44	.49	.93	.04	.01	4.6

01453000 LEHIGH RIVER AT BETHLEHEM, PA

LOCATION.--Lat 40°36'55", long 75°22'45", Lehigh County, PA. Hydrologic Unit 02040106, on left bank 110 ft (34 m) upstream from New Street Bridge at Bethlehem, and 1,800 ft (549 m) upstream from Monocacy Creek. Records include flow of Monocacy Creek.

DRAINAGE AREA.--1,279 mi² (3,313 km²) includes that of Monocacy Creek. At site used prior to Oct. 1, 1928, 1,229 mi² (3,183 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1902 to February 1905, April 1909 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at South Bethlehem" prior to October 1913.

REVISED RECORDS.--WSP 261: 1903-5. WSP 321: 1910-11. WSP 1051: Drainage area. WSP 1141: 1929-34(M). WSP 1302: 1914(M), 1916(M), 1918, 1921, 1927-28. WSP 1432: 1903, 1919(M), 1920-21, 1929, 1933.

GAGE.--Water-stage recorder. Datum of gage is 210.94 ft (64.295 m) NGVD. Prior to October 1928, nonrecording gage at New Street Bridge 120 ft (37 m) downstream at same datum. Oct. 1, 1928, to Sept. 30, 1962, water-stage recorder at site 4,250 ft (1,295 m) downstream at datum 2.49 ft (0.759 m) lower. Oct. 1, 1963 to Dec. 14, 1975, water-stage recorder at site 40 ft (12 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Wild Creek Reservoir since January 1941, Penn Forest Reservoir since October 1958, Francis E. Walter Reservoir since February 1961, and Beltzville Lake since February 1971 (see Delaware River basin, reservoirs in).

AVERAGE DISCHARGE.--70 years (1902-4, 1909-77), 2,319 ft³/s (65.67 m³/s), 24.62 in/yr (625 mm/yr), adjusted for diversion 1902-4, 1909-42 and, for recirculated water, October 1, 1959 to September 30, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,400 ft³/s (691 m³/s) Mar. 23, gage height, 10.23 ft (3.118 m); minimum, 519 ft³/s (14.7 m³/s) Sept. 11, gage height, 1.17 ft (0.357 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,000 ft³/s (2,610 m³/s) May 23, 1942, (gage height, about 25.9 ft or 7.89 m, from floodmark, present site and datum), from rating curve extended above 48,000 ft³/s (1,360 m³/s); minimum, 125 ft³/s (3.54 m³/s) June 28, 1965, gage height, 0.94 ft (0.287 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 28, 1902, reached a stage of 24.9 ft (7.59 m) from floodmark, present site and datum, discharge, about 88,000 ft³/s (2,490 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	5050	1330	1090	780	5020	6680	3170	1150	847	727	657
2	2060	5030	1450	1080	824	4690	5710	3090	1220	783	741	755
3	2420	4870	1240	1070	758	4420	7810	3030	1110	741	1180	713
4	3200	4200	1280	1060	775	7320	6800	2900	1030	727	1230	685
5	3070	3940	1340	1100	809	17500	8200	3330	1010	727	815	629
6	2850	3540	1280	1150	780	10100	9530	3560	1150	783	786	587
7	2620	3350	3760	1230	760	8340	9720	3080	1270	933	874	629
8	2380	3480	5830	1100	755	7230	8430	2870	1180	1200	1080	587
9	8830	3200	4550	1130	751	7000	6390	2870	1460	1200	900	573
10	11700	2830	3460	1210	819	7330	5240	3090	2280	1080	1100	545
11	7680	2410	2950	1230	862	5820	4820	3020	2520	1060	1200	587
12	6430	2360	2720	1310	939	4730	4700	3180	2040	1280	1300	946
13	5700	2250	2620	1180	1290	6780	4240	2420	1710	1140	1230	699
14	6760	2170	2190	1070	1800	11700	4030	2410	1430	962	1120	629
15	6440	2120	2200	1110	1660	9350	3760	2540	1250	843	924	741
16	3810	1920	2120	1040	1570	8330	2930	2450	1160	784	816	920
17	3400	1750	2020	964	1170	7330	2740	2110	1080	963	844	1260
18	3270	1730	1920	960	1020	7600	2660	1980	1030	894	1060	1370
19	3260	1790	1810	960	1100	5280	2580	2120	1010	795	996	1290
20	3580	1770	1820	950	1110	4870	2500	2150	1410	1430	891	1350
21	8050	1730	1850	1090	1050	4580	2340	2000	1660	845	780	1370
22	6680	1710	1430	1010	956	8860	2120	1840	1460	727	1370	1160
23	5670	1660	1610	959	1070	18100	2000	1730	1160	741	1060	1150
24	5100	1610	1520	976	2010	9990	3640	1560	801	861	903	1640
25	5410	1540	1370	1020	9850	7930	6250	1490	945	972	825	3360
26	6100	1460	1560	956	5280	6820	5460	1450	1400	884	769	4520
27	5510	1440	1430	876	4370	6190	5490	1390	1160	781	741	4770
28	5220	1440	1350	822	5550	5900	5060	1320	1120	713	727	5440
29	5040	1620	1330	810	---	6030	4690	1270	1140	741	741	4060
30	4340	1560	1110	805	---	6530	3650	1250	995	755	713	3140
31	5250	---	1100	800	---	7200	---	1210	---	797	657	---
TOTAL	153860	75530	63550	32110	50468	238950	150170	71880	39341	27989	29100	46762
MEAN	4963	2518	2050	1036	1802	7708	5006	2319	1311	903	939	1559
MAX	11700	5050	5830	1310	9850	18100	9720	3560	2520	1430	1370	5440
MIN	1950	1440	1100	800	751	4420	2000	1210	801	713	657	545
CFSM	3.88	1.97	1.60	.81	1.41	6.03	3.91	1.81	1.03	.71	.73	1.22
IN.	4.48	2.20	1.85	.93	1.47	6.95	4.37	2.09	1.14	.81	.85	1.36

CAL YR 1976 TOTAL 1059846 MEAN 2896 MAX 31300 MIN 685 CFSM 2.26 IN 30.83
WTR YR 1977 TOTAL 979718 MEAN 2684 MAX 18100 MIN 545 CFSM 2.10 IN 28.50

01455300 POHATCONG CREEK AT CARPENTERSVILLE, NJ

LOCATION.--Lat 40°37'30", long 75°11'10", Warren County, Hydrologic Unit 02040105, at bridge on Carpentersville-Riegelsville Road, 0.7 mi (1.1 km) south of Carpentersville, and 2,000 ft (610 m) upstream from mouth.

DRAINAGE AREA.--57.1 mi² (147.9 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
NOV											
04...	1130	296	8.3	9.0	2	11.4	1.0	230	130	140	30
FEB											
07...	1205	--	7.5	1.0	2	16.0	3.0	50	2	170	36
MAR											
21...	1215	244	7.7	7.0	9	12.2	--	50	--	94	22
APR											
13...	1300	250	8.4	15.0	2	10.6	1.0	80	5	110	24
MAY											
09...	1250	299	7.9	11.0	2	6.9	1.0	490	350	120	26
JUN											
07...	1300	312	8.1	19.0	5	9.5	<.5	700	350	140	32
JUL											
07...	0945	346	7.7	20.0	1	8.8	1.0	<20	5	150	35
AUG											
16...	1320	306	7.8	20.0	2	7.3	1.0	3500	350	140	31
SEP											
21...	1245	314	8.0	15.0	5	9.7	.5	700	540	140	32

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV										
04...	15	7.7	2.2	--	27	9.3	--	171	6	--
FEB										
07...	19	12	2.0	--	32	20	--	209	15	--
MAR										
21...	9.6	7.0	2.0	--	28	10	--	144	60	--
APR										
13...	11	6.6	1.8	--	25	9.2	--	169	6	--
MAY										
09...	13	6.8	2.0	.0	26	<.0	9.0	182	1	--
JUN										
07...	15	7.2	2.1	--	27	9.9	--	195	9	--
JUL										
07...	14	7.2	2.1	--	24	10	--	211	22	2.1
AUG										
16...	14	7.3	2.2	--	26	9.3	--	212	23	2.0
SEP										
21...	15	8.0	2.4	.0	26	10	9.8	185	8	1.9

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
NOV										
04...	--	--	--	1.1	--	--	--	--	1.4	--
FEB										
07...	--	--	--	1.4	--	--	.11	--	4.6	--
MAR										
21...	--	--	--	1.1	--	--	.08	--	2.8	--
APR										
13...	--	--	--	1.4	--	--	.04	--	3.2	--
MAY										
09...	--	--	--	1.3	--	--	.05	--	4.9	--
JUN										
07...	--	--	--	1.1	--	--	.07	--	4.7	--
JUL										
07...	.01	.03	.42	.45	--	2.6	.10	.04	5.4	--
AUG										
16...	.01	.01	.52	.53	--	2.5	.12	.06	4.7	--
SEP										
21...	.01	.02	.39	.41	740	2.3	.16	.07	8.6	3.8

01455300 POHATCONG CREEK AT CARPENTERSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 09...	1250	40	1	--	2	0	--	--	0	0
SEP 21...	1245	0	0	4	80	0	<10	<10	0	2

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 09...	--	4	--	100	--	2	--	30	--	.0
SEP 21...	<10	2	<10	70	5300	5	15	20	200	.0

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTUM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
MAY 09...	--	6	--	0	50	--	0	--	--	--
SEP 21...	.0	4	<10	0	10	20	0	0	.0	3

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
MAY 09...	--	--	--	--	--	--	--	--	--
SEP 21...	.0	.0	.4	.2	.0	.0	.0	.0	0

01455500 MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, NJ

LOCATION.--Lat 40°55'00", long 74°39'55", Morris County, Hydrologic Unit 02040105, just upstream of highway bridge and 300 ft (91 m) downstream from Lake Hopatcong dam in Landing.

DRAINAGE AREA.--25.6 mi² (66.3 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1928 to current year.
CHEMICAL ANALYSES: Water years 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)
OCT 18...	1030	207	10.2	11.0	2	11.2	--	<20	<2	46	12
NOV 30...	1000	198	--	2.5	2	13.3	2.0	<20	4	49	13
JAN 31...	1030	242	8.2	.0	1	18.6	--	<20	<2	56	15
MAR 14...	1030	210	7.2	9.0	3	16.1	--	<20	130	49	13
APR 12...	1030	206	6.9	9.0	2	10.1	1.0	<20	<2	52	14
MAY 04...	1030	225	7.6	15.0	2	9.0	1.0	20	2	62	18
JUN 06...	1020	220	8.3	20.0	2	9.0	--	<20	33	55	14
JUL 06...	0955	243	7.9	23.0	1	7.0	1.0	230	49	55	15
AUG 01...	1030	230	7.8	22.0	1	7.0	--	20	49	56	15
SEP 19...	1020	225	7.4	19.0	2	6.8	--	20	9	53	14

DATE	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 18...	4.0	17	1.1	--	15	32	--	111	5	--
NOV 30...	3.9	16	1.0	--	18	32	--	135	3	--
JAN 31...	4.6	20	1.3	--	19	35	--	131	2	--
MAR 14...	3.9	17	1.1	--	16	34	--	116	4	--
APR 12...	4.2	18	1.2	--	18	35	--	151	6	--
MAY 04...	4.2	18	1.3	--	18	33	--	146	6	--
JUN 06...	4.8	18	.8	.0	15	35	.7	117	0	--
JUL 06...	4.3	18	1.5	--	14	35	--	135	3	.05
AUG 01...	4.6	19	1.6	--	14	37	--	130	6	.06
SEP 19...	4.4	18	1.5	--	14	36	--	124	0	.08

01455500 MUSCONETCONG RIVER AT OUTLET OF LAKE HOPATCONG, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 10...	--	--	--	1.4	--	--	--	--	12	--
NOV 30...	--	--	--	1.4	--	--	--	--	4.3	--
JAN 31...	--	--	--	1.4	--	--	.04	--	4.0	--
MAR 14...	--	--	--	1.4	--	--	.03	--	8.4	--
APR 12...	--	--	--	1.3	--	--	.04	--	1.0	--
MAY 04...	--	--	--	1.1	--	--	.03	--	7.0	--
JUN 06...	--	--	--	1.1	--	--	.03	--	7.4	--
JUL 06...	.00	.09	.41	.50	--	.55	.01	.00	6.5	--
AUG 01...	.00	.08	.71	.79	--	.05	.04	.00	6.0	--
SEP 19...	.01	.05	.41	.46	530	.55	.02	.00	8.5	5.9

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
JUN 06...	1020	60	30	30	2	--	30	0	--	--	0
SEP 19...	1020	--	--	--	--	4	--	--	<10	120	--

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
JUN 06...	0	--	3	--	130	60	--	3	--	60
SEP 19...	--	30	--	100	--	--	23000	--	<10	--

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
JUN 06...	--	.0	--	6	--	0	60	--	--	--
SEP 19...	900	--	.0	--	60	--	--	120	14000	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
JUN 06...	--	--	--	--	--	--	--	--	--	--
SEP 19...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01455801 MUSCONETCONG RIVER AT LOCKWOOD, NJ

LOCATION.--Lat 40°55'10", long 74°44'07", Sussex County, Hydrologic Unit 02040105, at bridge 0.4 mi (0.7 km) south of Jefferson Lake, 0.2 mi (0.4 km) southeast of Cage Hill, and at boundary between Sussex County and Morris County.

DRAINAGE AREA.--60.5 mi^2 (156.7 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 18...	1130	298	10.4	9.0	1	11.2	2.0	20	33
NOV 30...	1130	217	8.9	1.0	2	14.0	2.9	50	4
AUG 01...	1145	349	7.9	21.0	1	4.2	--	20	170
SEP 19...	1140	317	7.9	18.5	3	8.6	--	1100	350

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 18...	99	24	9.4	16	1.8	21	29	165	6
NOV 30...	61	16	5.2	17	1.2	20	31	127	6
AUG 01...	120	29	11	21	1.7	19	39	193	6
SEP 19...	100	25	9.7	20	2.0	18	37	183	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 18...	--	--	--	--	1.0	--	--	--	6.1
NOV 30...	--	--	--	--	1.4	--	--	--	4.5
AUG 01...	.59	.02	.03	.51	.54	1.2	.11	.08	7.1
SEP 19...	.80	.16	.18	.72	.90	1.9	.39	.29	7.9

01455880 MUSCONETCONG RIVER NEAR SAXTON FALLS, NJ

LOCATION.--Lat 40°54'31", long 74°46'20", Warren County, Hydrologic Unit 02040105, at bridge on unnamed road 1.3 mi (2.1 km) upstream from outlet of Waterloo Lakes, 1.8 mi (2.9 km) northeast of Saxton Falls, and 3.7 mi (6.0 km) southeast of Tranquility.

DRAINAGE AREA.--64.9 mi² (168.1 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: March to July 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
JAN									
12...	1145	--	--	--	--	--	--	70	79
MAR									
01...	1400	186	6.6	5.0	2	22.1	2.0	<20	2
14...	1130	201	7.0	10.0	9	15.3	--	80	240
APR									
12...	1145	220	7.1	11.5	2	10.0	2.0	--	--
MAY									
04...	1145	250	7.9	15.0	2	9.4	2.0	230	2
JUN									
06...	1150	284	7.3	19.0	2	7.7	--	40	17
JUL									
06...	1100	327	--	--	1	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
JAN									
12...	--	--	--	--	--	--	--	--	--
MAR									
01...	54	13	5.2	13	1.3	16	25	97	0
14...	55	--	4.0	13	1.1	17	--	--	10
APR									
12...	70	19	5.5	16	1.0	19	30	145	4
MAY									
04...	82	21	7.1	16	1.3	18	32	155	2
JUN									
06...	87	21	8.3	5.0	1.5	18	8.2	157	9
JUL									
06...	110	26	10	10	1.4	16	35	189	10

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN									
12...	--	--	1.0	--	--	--	--	--	--
MAR									
01...	--	--	.00	1.3	1.3	1.3	.15	--	3.5
14...	--	--	.00	1.4	1.4	1.4	.07	--	9.7
APR									
12...	--	--	--	--	1.0	--	.15	--	1.6
MAY									
04...	--	--	.00	1.4	1.4	1.6	.08	--	10
JUN									
06...	--	--	.00	1.1	1.1	1.1	.10	--	5.3
JUL									
06...	.42	.02	.06	.63	.69	1.1	.13	.10	7.0

01456030 MUSCONETCONG RIVER AT STEPHENS STATE PARK, NJ

LOCATION.--Lat 40°52'24", long 74°48'23", Warren County, Hydrologic Unit 02040105, at bridge 2.0 mi (3.2 km) northwest of outlet of Budd Lake, and 2.4 mi (3.9 km) northwest of Drakestown.

DRAINAGE AREA.--72.5 mi² (187.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 10...	1230	260	10.2	10.0	1	12.2	--	<20	7
NOV 30...	1300	255	7.7	2.0	1	14.0	1.0	<20	8
JAN 31...	1205	351	8.7	.0	3	15.7	--	20	<2
MAR 14...	1215	204	7.1	10.0	10	16.3	--	50	130
APR 12...	1300	227	7.3	13.0	2	12.5	1.0	<20	11
MAY 04...	1245	255	8.3	15.5	1	9.4	<.5	<20	2
JUN 06...	1310	302	8.0	19.0	2	9.0	--	<20	350
JUL 06...	0940	325	7.8	22.0	1	8.4	1.0	<20	350
AUG 01...	1300	331	8.2	20.5	1	8.8	--	<20	540
17...	1010	320	7.6	22.0	1	8.4	1.0	170	110
SEP 19...	1300	342	8.2	19.0	1	9.6	--	20	79

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 10...	72	13	9.5	12	1.4	18	24	150	5
NOV 30...	82	20	7.7	16	1.4	21	30	155	4
JAN 31...	110	26	12	21	2.0	24	37	195	4
MAR 14...	56	14	5.1	13	1.2	16	26	111	16
APR 12...	66	17	5.7	15	1.1	18	29	148	2
MAY 04...	88	23	7.4	15	1.3	19	29	141	6
JUN 06...	99	23	10	17	1.3	17	33	166	1
JUL 06...	110	27	10	15	1.2	17	31	195	9
AUG 01...	120	28	12	17	1.4	16	33	186	4
17...	120	30	11	17	2.2	14	33	199	0
SEP 19...	110	27	11	19	2.1	18	35	186	0

01456030 MUSCONETCONG RIVER AT STEPHENS STATE PARK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
18...	--	--	--	--	1.1	--	--	--	9.5
NOV									
30...	--	--	--	--	1.7	--	--	--	3.6
JAN									
31...	--	--	--	--	1.8	--	.10	--	4.0
MAR									
14...	--	--	--	--	1.4	--	.05	--	7.1
APR									
12...	--	--	--	--	1.1	--	.04	--	2.0
MAY									
04...	--	--	--	--	1.1	--	.08	--	6.5
JUN									
06...	--	--	--	--	1.4	--	.06	--	6.3
JUL									
06...	.20	.01	.03	.44	.47	.68	.07	.06	5.1
AUG									
01...	.07	.01	.01	.28	.29	.37	.66	.04	5.4
17...	.15	.01	.01	.38	.39	.55	.13	.10	4.7
SEP									
19...	.61	.02	.02	.36	.38	1.0	.13	.10	7.6

01456200 MUSCONETCONG RIVER AT BEATYESTOWN, NJ

LOCATION.--Lat 40°48'48", long 74°50'32", Warren County, Hydrologic Unit 02040105, at bridge at Beatyestown, 2.1 mi (3.4 km) northeast of Stephensburg, and 3.5 mi (5.7 km) northeast of Scrappy Corner.

DRAINAGE AREA.--90.7 mi^2 (234.9 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT											
18...	1330	329	9.9	10.0	1	12.0	1.0	<20	2	130	29
NOV											
30...	1400	289	7.7	2.0	2	14.2	2.0	<20	33	98	23
JAN											
31...	1330	400	8.6	1.0	2	18.2	--	<20	8	140	32
MAR											
14...	1330	225	7.4	10.5	10	14.9	--	140	350	65	16
APR											
12...	1400	222	8.4	14.5	2	10.6	1.0	130	2	88	23
MAY											
04...	1400	293	8.1	15.0	2	8.8	1.0	20	11	100	25
JUN											
06...	1400	367	7.8	17.5	4	9.0	--	20	240	140	31
JUL											
06...	1100	370	7.9	21.5	1	8.4	1.0	230	22	140	33
AUG											
01...	1400	412	8.4	21.0	1	8.7	--	790	1600	160	35
17...	1105	371	7.8	21.0	1	7.7	1.0	230	130	160	38
SEP											
19...	1400	387	8.4	19.0	1	9.2	--	80	49	140	32

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT										
18...	13	13	1.8	.0	20	24	8.2	185	0	--
NOV										
30...	9.9	15	1.5	--	21	27	--	157	7	--
JAN										
31...	14	21	2.0	--	23	37	--	212	5	--
MAR										
14...	6.1	14	1.4	--	18	26	--	120	26	--
APR										
12...	7.5	15	1.3	--	18	28	--	156	2	--
MAY										
04...	10	14	1.3	--	19	27	--	174	6	--
JUN										
06...	14	16	1.5	--	20	29	--	210	12	--
JUL										
06...	14	14	1.4	--	16	27	--	234	1	.06
AUG										
01...	17	20	2.2	--	21	33	--	230	5	1.0
17...	16	15	1.9	--	16	27	--	228	0	1.1
SEP										
19...	15	19	2.3	--	19	32	--	209	0	.00

01456200 MUSCONETCONG RIVER AT BEATYESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT										
18...	--	--	--	1.4	140	--	--	--	5.9	1.9
NOV										
30...	--	--	--	1.5	--	--	--	--	3.8	--
JAN										
31...	--	--	--	2.2	--	--	.26	--	3.0	--
MAR										
14...	--	--	--	1.4	--	--	.07	--	8.1	--
APR										
12...	--	--	--	1.1	--	--	.09	--	1.8	--
MAY										
04...	--	--	--	1.4	--	--	.09	--	8.1	--
JUN										
06...	--	--	--	1.3	--	--	.22	--	5.8	--
JUL										
06...	.02	.06	.40	.46	--	1.3	.13	.11	5.7	--
AUG										
01...	.05	.07	.73	.80	--	2.6	.69	.63	5.9	--
17...	.02	.05	.38	.43	--	1.5	.20	.17	5.3	--
SEP										
19...	.03	.04	.42	.46	--	.49	.43	.37	8.2	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT											
18...	1330	0	0	0	2	5	60	0	0	11	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT										
18...	0	0	0	4	130	80	4900	2	9	30

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT										
18...	360	<.5	.0	2	2	0	10	29	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT										
18...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01456600 MUSCONETCONG RIVER AT HAMPTON, NJ

LOCATION.--Lat 40°42'42", long 74°58'06", Hunterdon County, Hydrologic Unit 02030105, at bridge on State Route 31, 2.6 mi (4.2 km) northwest of Mount Kipp, and 4.2 mi (6.8 km) north of Van Syckel.

DRAINAGE AREA.--122 mi^2 (316 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT									
05...	1000	296	8.0	15.0	2	8.5	1.0	230	>2400
NOV									
30...	1500	303	8.1	1.5	2	14.8	2.0	50	70
FEB									
02...	1330	--	8.0	2.0	3	10.8	2.0	20	17
MAR									
14...	1415	220	7.5	11.0	10	14.2	--	330	350
APR									
13...	1015	258	7.7	13.0	1	4.9	--	<20	2
MAY									
09...	1015	268	7.5	12.0	4	9.0	8.0	210	540
JUN									
07...	1015	312	7.8	15.0	4	9.4	1.0	490	130
JUL									
06...	1030	358	7.8	18.0	1	9.1	2.0	490	350
AUG									
17...	1030	341	7.8	16.0	1	13.0	2.0	790	1600
SEP									
21...	1015	327	7.9	14.0	1	9.4	--	5400	>2400

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT									
05...	110	26	12	11	1.6	18	20	--	4
NOV									
30...	110	26	12	13	1.4	21	23	182	3
FEB									
02...	120	28	13	13	1.5	20	27	181	5
MAR									
14...	70	17	6.8	12	1.5	18	22	121	24
APR									
13...	95	23	9.2	13	1.3	19	24	174	0
MAY									
09...	79	19	7.7	12	1.3	19	24	149	1
JUN									
07...	120	28	13	12	1.4	18	22	186	8
JUL									
06...	140	32	14	12	1.5	16	22	186	9
AUG									
17...	140	33	14	12	1.8	16	22	205	0
SEP									
21...	130	30	14	13	2.1	18	23	180	0

01456600 MUSCONETCONG RIVER AT HAMPTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
05...	--	--	--	--	1.1	--	--	--	--
NOV									
30...	--	--	--	--	1.7	--	--	--	4.0
FEB									
02...	--	--	--	--	2.0	--	.14	--	7.1
MAR									
14...	--	--	--	--	1.4	--	.08	--	8.3
APR									
13...	--	--	--	--	1.1	--	.07	--	1.3
MAY									
09...	--	--	--	--	1.0	--	1.8	--	7.9
JUN									
07...	--	--	--	--	1.7	--	.08	--	5.9
JUL									
06...	--	--	--	--	1.0	--	.12	--	7.4
AUG									
17...	1.6	.01	.00	.01	.01	2.4	.20	.13	6.0
SEP									
21...	1.6	.01	.02	.46	.48	2.1	.32	.13	8.2

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ

LOCATION.--Lat 40°40'20", long 75°[illegible]'40", Warren County, Hydrologic Unit 02040105, on right bank just downstream from highway bridge, 1.5 mi (2.4 km) upstream from Bloomsbury, and 9.5 mi (15.3 km) upstream from mouth.

DRAINAGE AREA.--143 mi^2 (370 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: July 1903 to March 1907, July 1921 to current year.
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1958, 1971-74.

REVISED DISCHARGE RECORDS.--WSP 521: Drainage area. WSP 1051: 1944-45. WSP 1382: 1904-6, 1922, 1923-29(M), 1931(M), 1933-34(M), 1936(M), 1940, 1942(M), 1944-45(M), 1951-52(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 29, 1932. Datum of gage is 274.83 ft (83.768 m) NGVD. July 1903 to Mar. 31, 1907, nonrecording gage at bridge 15 ft (4.6 m) upstream at different datum. July 26 to Sept. 12, 1921, nonrecording gage at bridge at present datum.

REMARKS.--Discharge records fair. Flow regulated by Lake Hopatcong (see Delaware River Basin, reservoirs in). Diurnal fluctuation caused by small powerplants above station.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--59 years (1903-6, 1921-77), 230 ft^3/s (6.514 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 24	2400	*2730	77.3	5.91	1.801	Mar. 22	2345	1840	52.1	4.97	1.515
Mar. 13	2130	1430	40.5	4.34	1.423	Apr. 5	0915	1020	28.9	3.57	1.088

Minimum discharge, 37 ft^3/s (1.05 m^3/s) Sept. 11, 15, gage height, 1.14 ft (0.347 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,960 ft^3/s (197 m^3/s) Oct. 10, 1903 (gage height, 8.00 ft or 2.438 m, from graph of gage readings, site and datum then in use) from rating curve extended above 1,800 ft^3/s (51.0 m^3/s) on basis of slope-area measurement at gage height, 6.95 ft (2.118 m); minimum, 8.1 ft^3/s (0.23 m^3/s) Aug. 2, 1955; minimum daily, 27 ft^3/s (0.76 m^3/s) Sept. 8, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	280	242	78	45	344	460	288	127	102	60	59
2	140	276	232	77	43	292	490	272	135	92	60	59
3	160	300	142	76	45	253	635	264	115	85	92	54
4	163	308	102	75	50	425	540	253	102	83	115	50
5	135	276	77	72	50	615	885	340	95	83	79	50
6	110	235	81	70	45	510	815	332	157	90	70	54
7	97	211	320	70	42	420	720	316	127	90	77	50
8	90	190	400	69	40	360	627	340	107	102	87	50
9	249	142	380	90	39	324	600	364	142	90	130	48
10	246	87	316	105	38	292	555	372	288	79	110	48
11	184	125	276	100	60	268	510	348	232	79	130	43
12	145	288	272	95	100	249	470	312	178	87	102	46
13	120	296	256	87	150	530	440	288	152	92	125	46
14	110	300	178	82	130	870	400	264	135	74	117	48
15	97	300	142	77	110	650	372	242	127	72	102	43
16	92	296	137	72	90	530	348	225	117	72	93	50
17	83	308	132	70	82	450	332	211	112	68	83	74
18	83	332	127	68	79	440	308	214	107	70	90	77
19	81	328	122	75	78	435	292	242	107	68	93	74
20	100	324	122	70	77	410	268	225	110	92	74	74
21	324	320	175	66	80	380	256	204	166	79	63	81
22	284	312	178	70	90	905	249	178	148	72	86	74
23	204	225	169	77	122	1430	242	163	117	66	83	68
24	175	140	157	80	581	1210	256	150	102	60	77	90
25	193	117	150	74	1310	1010	352	155	200	68	90	229
26	288	107	148	67	595	870	372	142	228	64	70	238
27	249	100	115	62	445	760	440	132	148	62	65	193
28	218	95	102	57	410	685	395	125	150	60	59	137
29	197	110	105	54	---	635	348	130	155	58	63	110
30	175	175	83	52	---	575	312	112	112	56	59	90
31	272	---	81	49	---	525	---	107	---	54	57	---
TOTAL	5204	6903	5519	2286	5026	17652	13289	7310	4298	2369	2661	2407
MEAN	168	230	178	73.7	180	569	443	236	143	76.4	85.8	80.2
MAX	324	332	400	105	1310	1430	885	372	288	102	130	238
MIN	81	87	77	49	38	249	242	107	95	54	57	43

CAL YR 1976 TOTAL 77710 MEAN 212 MAX 1250 MIN 71
WTR YR 1977 TOTAL 74924 MEAN 205 MAX 1430 MIN 38

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA+MG) (MG/L)
OCT 07...	1100	98	313	8.2	14.5	2	--	1.0	230	540	130
DEC 01...	1500	242	289	8.7	1.5	1	16.0	4.0	20	49	110
FEB 07...	1035	E42	--	7.2	1.0	3	15.1	1.0	80	5	150
MAR 21...	1015	385	267	7.8	6.0	2	7.6	--	50	17	91
APR 13...	1130	445	270	8.0	14.0	1	10.2	2.0	170	2	97
MAY 09...	1110	364	285	7.8	12.0	1	9.7	3.0	210	240	96
JUN 07...	1130	125	311	8.4	15.5	2	9.7	<.5	700	17	130
JUL 06...	1200	88	366	8.4	18.5	1	12.6	1.0	1300	79	150
AUG 17...	1145	83	342	8.1	16.5	1	12.1	2.0	1400	350	150
SEP 21...	1115	81	341	8.3	14.5	1	11.0	1.0	9200	920	150

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 07...	29	14	9.3	1.6	.2	18	18	8.8	172	3	--
DEC 01...	26	12	13	1.5	--	21	23	--	170	5	--
FEB 07...	34	16	17	1.9	--	25	31	--	201	9	--
MAR 21...	21	9.3	13	1.5	--	19	24	--	140	3	--
APR 13...	23	9.7	12	1.3	--	19	22	--	173	1	--
MAY 09...	22	9.9	12	1.4	--	19	22	--	159	16	--
JUN 07...	30	14	11	1.4	--	19	19	--	188	6	--
JUL 06...	35	15	10	1.5	--	17	18	--	218	5	--
AUG 17...	35	16	10	1.7	--	17	18	--	212	10	2.0
SEP 21...	32	16	12	2.1	--	19	20	--	177	8	2.0

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	--	1.1	1070	--	--	--	--	7.2
DEC 01...	--	--	--	1.5	--	--	--	--	6.1	--
FEB 07...	--	--	--	1.7	--	--	.15	--	6.6	--
MAR 21...	--	--	--	1.1	--	--	.09	--	2.6	--
APR 13...	--	--	--	1.0	--	--	.03	--	2.4	--
MAY 09...	--	--	--	1.1	--	--	.04	--	5.6	--
JUN 07...	--	--	--	1.1	--	--	.08	--	4.3	--
JUL 06...	--	--	--	1.1	--	--	.08	--	6.1	--
AUG 17...	.01	.00	.34	.34	--	2.3	.17	.12	8.8	--
SEP 21...	.01	.03	.46	.49	--	2.5	.20	.13	7.9	--

01457000 MUSCONETCONG RIVER NEAR BLOOMSBURY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 07...	1100	30	0	30	1	9	40	1	0	26	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
OCT 07...	2	10	10	10	120	60	9900	1	24	10

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 07...	800	<.5	.1	3	0	0	20	54	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 07...	2	.0	17	.0	17	.0	.0	.0	.0	0

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'20", Warren County, Hydrologic Unit 02040105, at bridge on State Highway 13, 0.2 mi (0.4 km) north of Mount Joy, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--156 mi^3 (404 km^3).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1962, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
NOV 04...	1330	268	7.5	7.5	4	11.6	3.0	80	79	98	23
FEB 07...	1330	--	7.4	.0	5	13.6	2.0	50	5	150	33
MAR 21...	1420	272	7.7	7.0	2	9.6	--	<20	13	95	22
APR 13...	1400	268	8.1	15.0	2	11.6	<.5	<20	17	100	24
MAY 09...	1400	292	7.9	12.5	2	9.2	1.0	330	110	100	23
JUN 07...	1400	310	8.1	15.0	2	9.1	<.5	490	170	140	31
JUL 06...	1350	365	8.2	20.0	1	9.8	1.0	330	130	150	35
AUG 17...	1345	345	8.0	17.0	1	9.4	--	790	920	150	35
SEP 21...	1345	361	8.1	16.0	1	9.4	1.0	70	920	160	34

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV 04...	9.9	13	1.6	--	23	24	--	141	18	--
FEB 07...	16	15	1.8	--	24	27	--	190	18	--
MAR 21...	9.8	12	1.6	--	19	23	--	137	19	--
APR 13...	10	12	1.4	--	20	21	--	183	3	--
MAY 09...	11	12	1.5	.0	20	21	5.1	159	14	--
JUN 07...	14	11	1.5	--	21	20	--	210	14	--
JUL 06...	15	9.5	1.5	--	18	18	--	230	28	--
AUG 17...	16	11	1.8	--	21	19	--	218	0	1.7
SEP 21...	17	12	2.1	.0	23	20	7.6	188	0	1.7

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
NOV 04...	--	--	--	1.1	--	--	--	--	5.6	--
FEB 07...	--	--	--	1.5	--	--	.10	--	2.8	--
MAR 21...	--	--	--	1.4	--	--	.06	--	2.5	--
APR 13...	--	--	--	1.1	--	--	.05	--	1.6	--
MAY 09...	--	--	--	1.1	--	--	--	--	5.7	--
JUN 07...	--	--	--	1.3	--	--	.46	--	5.1	--
JUL 06...	--	--	--	1.7	--	--	.07	--	--	--
AUG 17...	.01	.00	.52	.52	--	2.2	.12	.07	5.0	--
SEP 21...	.01	.02	.39	.41	790	2.1	.13	.03	8.1	5.4

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	SUS-PENDED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)
MAY 09...	1400	70	0	70	2	--	10	0	--	--	0
SEP 21...	1345	--	--	300	0	3	80	0	<10	10	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)
MAY 09...	0	--	4	--	630	60	--	3	--	60	--
SEP 21...	3	<10	5	10	--	50	8600	6	39	40	170

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)
MAY 09...	.0	--	3	--	0	80	--	2	--	--
SEP 21...	.0	.0	4	<10	0	30	30	0	0	.0

DATE	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
MAY 09...	--	--	--	--	--	--	--	--	--	--
SEP 21...	0	.9	2.2	2.1	1.9	.0	.0	.0	1.0	0

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'36", long 75°11'17", Warren County, Hydrologic Unit 02040105, at suspension bridge, and 600 ft (183 m) upstream from Musconetcong River.

DRAINAGE AREA.--6,328 mi² (16,390 km²), includes that of Musconetcong River.

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1906 to current year.
CHEMICAL ANALYSES: Water years 1969-74, 1976 to current year.

REMARKS.--Discharge records include flow of Musconetcong River. Water-quality records at periods of base flow probably are influenced by inflow from the Musconetcong River.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 07...	1230	112	7.5	7.5	4	12.1	1.0	170	280
FEB 23...	1210	238	7.4	8.0	2	17.4	5.0	230	23
MAR 21...	1310	129	7.2	4.5	4	13.0	--	140	34
APR 14...	1135	144	7.2	13.0	3	10.5	<.5	1100	79
MAY 11...	1145	119	7.5	12.0	2	10.8	<.5	340	17
JUN 13...	1150	160	7.9	20.0	3	6.8	--	20	23
JUL 13...	1340	202	--	26.0	1	4.2	1.0	490	8
AUG 09...	1310	212	--	26.0	2	7.1	2.0	3500	350

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 07...	41	11	3.3	4.9	1.2	16	6.1	64	13
FEB 23...	72	19	5.9	11	1.8	25	17	110	9
MAR 21...	41	11	3.2	5.1	1.3	16	8.3	67	0
APR 14...	78	24	4.5	6.8	1.4	21	8.5	75	2
MAY 11...	44	12	3.3	4.7	1.2	16	6.7	84	9
JUN 13...	58	15	5.0	8.0	1.6	19	10	96	2
JUL 13...	72	19	5.9	7.9	1.7	22	10	128	15
AUG 09...	77	20	6.6	8.8	2.1	25	12	126	9

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 07...	--	--	--	--	1.3	--	--	--	3.6
FEB 23...	--	--	--	--	1.4	--	.12	--	3.0
MAR 21...	--	--	--	--	1.4	--	.05	--	3.0
APR 14...	--	--	--	--	1.3	--	.03	--	5.8
MAY 11...	--	--	--	--	1.5	--	.02	--	5.6
JUN 13...	--	--	--	--	1.3	--	.03	--	5.4
JUL 13...	1.0	.10	.29	.22	.51	1.6	.11	.07	4.5
AUG 09...	1.1	.09	.20	.54	.74	1.9	.15	.10	4.9

01458100 HAKIHOKAKE CREEK AT MILFORD, NJ

LOCATION.--Lat 40°34'06", long 75°05'44", Hunterdon County, Hydrologic Unit 02040105, at highway bridge at Milford, and 4,000 ft (1,220 m) upstream from mouth.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV										
04...	1430	251	8.7	10.5	1	11.8	1.0	230	49	99
FEB										
14...	1000	232	7.0	1.5	5	11.0	--	330	540	81
MAR										
15...	1000	186	7.5	10.0	5	--	2.0	330	350	65
APR										
14...	1315	197	9.1	17.0	1	11.4	1.0	<20	7	75
MAY										
11...	1310	193	8.8	15.0	1	11.1	1.0	20	8	81
JUN										
13...	1245	233	8.4	21.5	3	9.6	--	40	110	94
JUL										
07...	1040	265	8.4	19.0	1	9.3	<.5	2400	1600	100
AUG										
18...	1100	264	8.8	19.0	1	11.9	1.0	490	920	110

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV									
04...	25	8.9	9.0	1.7	28	13	--	149	5
FEB									
14...	21	7.0	13	2.5	24	24	--	146	9
MAR									
15...	18	4.9	8.3	2.1	27	15	--	115	4
APR									
14...	20	6.2	8.2	1.7	26	11	--	109	1
MAY									
11...	21	6.9	7.8	1.6	20	11	12	150	2
JUN									
13...	23	8.8	7.6	1.6	24	8.9	--	153	3
JUL									
07...	25	9.6	8.2	1.5	31	11	--	168	16
AUG									
18...	27	11	9.0	1.5	28	8.7	--	170	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
04...	--	--	--	--	1.4	--	--	--	.8
FEB									
14...	--	--	--	--	1.5	--	.07	--	3.4
MAR									
15...	--	--	--	--	1.1	--	.04	--	6.2
APR									
14...	--	--	--	--	1.1	--	.02	--	4.9
MAY									
11...	--	--	--	--	1.4	--	.01	--	4.6
JUN									
13...	--	--	--	--	1.1	--	.03	--	3.4
JUL									
07...	1.1	.01	.03	.40	.43	1.5	.05	.02	5.0
AUG									
18...	1.3	.01	.01	.19	.20	1.5	.04	.03	6.9

01458100 HAKIHOKAKE CREEK AT MILFORD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 11...	1310	20	1	0	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 11...	20	4	20	.0	3	0	30

01458400 HARIHOKAKE CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°32'53", long 75°04'09", Hunterdon County, Hydrologic Unit 02040105, at bridge on Frenchtown-Milford Road, 1.5 mi (2.4 km) north of Frenchtown, and 1,600 ft (490 m) upstream from mouth.

DRAINAGE AREA.--9.75 mi² (25.25 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 26...	0930	189	8.9	9.0	8	11.0	1.0	1700	>2400	68
DEC 08...	1100	199	7.6	.0	8	14.0	3.0	790	920	39
FEB 14...	1100	191	7.1	.0	7	13.0	--	490	920	61
MAR 15...	1100	174	7.4	11.0	7	16.9	1.0	490	350	59
APR 14...	1400	143	9.2	10.5	1	10.2	1.0	<20	27	55
MAY 11...	1420	145	8.5	15.5	1	9.3	1.0	<20	8	56
JUN 13...	1315	142	7.9	21.0	2	8.7	--	80	350	53
JUL 07...	1115	167	8.3	21.0	1	8.0	1.0	230	170	62
AUG 18...	1130	177	7.9	19.0	1	8.3	<.5	230	540	64

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 26...	20	4.5	6.5	3.1	--	25	11	--	112	15
DEC 08...	11	2.8	5.4	1.6	--	30	12	--	132	13
FEB 14...	18	4.0	9.4	2.8	--	24	10	--	129	17
MAR 15...	17	4.1	6.5	2.2	--	27	12	--	113	8
APR 14...	17	3.1	5.7	1.7	--	20	6.5	--	73	0
MAY 11...	17	3.3	5.8	1.7	.0	21	8.3	5.6	116	5
JUN 13...	16	3.2	5.7	1.8	--	14	6.9	--	83	0
JUL 07...	19	3.6	5.5	1.9	--	13	6.6	--	90	3
AUG 18...	19	3.9	6.7	2.1	--	13	7.9	--	103	2

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 26...	--	--	--	--	1.4	--	--	--	3.4
DEC 08...	--	--	--	--	1.7	--	.07	--	5.2
FEB 14...	--	--	--	--	1.7	--	.12	--	6.0
MAR 15...	--	--	--	--	1.3	--	.07	--	5.8
APR 14...	--	--	--	--	1.1	--	.04	--	6.1
MAY 11...	--	--	--	--	1.4	--	.02	--	5.2
JUN 13...	--	--	--	--	1.5	--	.06	--	6.0
JUL 07...	.29	.00	.01	.11	.12	.41	.05	.04	5.3
AUG 18...	.38	.01	.01	.31	.32	.71	.06	.05	6.7

01458400 HARIHOKAKE CREEK NEAR FRENCHTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
11...	1420	20	1	0	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY							
11...	30	3	10	.0	6	0	30

01458500 DELAWARE RIVER AT FRENCHTOWN, NJ

LOCATION.--Lat 40°31'34", long 75°03'55", Hunterdon County, Hydrologic Unit 02040105, at bridge at Frenchtown, a 3.4 mi (5.5 km) southeast of Milford.

DRAINAGE AREA.--6,420 mi² (16,628 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)
OCT									
26...	1030	118	8.3	9.0	8	9.8	2.0	330	350
DEC									
08...	1200	161	7.4	1.0	25	11.0	4.0	2400	>2400
FEB									
14...	1130	228	7.1	4.0	6	13.7	--	790	540
APR									
05...	1130	100	7.0	8.0	25	13.2	3.0	2200	920
MAY									
02...	1120	137	7.5	14.0	1	10.7	--	20	>2400
31...	1115	220	8.2	22.0	2	10.2	2.0	20	17
JUL									
11...	1100	213	8.0	25.0	1	6.7	1.0	80	8
AUG									
08...	1115	206	8.1	26.0	1	6.4	1.0	490	27

DATE	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT									
26...	36	9.9	2.8	4.0	1.3	16	5.3	93	7
DEC									
08...	36	9.9	2.8	4.5	1.0	21	9.8	76	89
FEB									
14...	72	19	6.0	12	2.2	25	18	124	22
APR									
05...	40	11	3.0	4.5	1.2	13	7.0	57	43
MAY									
02...	59	17	4.1	5.3	1.1	17	7.6	85	3
31...	110	29	10	8.3	1.7	26	12	150	10
JUL									
11...	77	20	6.5	8.8	1.6	24	12	162	7
AUG									
08...	79	20	7.0	9.8	2.0	24	13	128	2

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
26...	--	--	--	--	1.1	--	--	--	1.0
DEC									
08...	--	--	--	--	2.2	--	.10	--	4.8
FEB									
14...	--	--	--	--	2.1	--	.16	--	2.4
APR									
05...	--	--	--	--	1.4	--	.07	--	--
MAY									
02...	--	--	--	--	.80	--	.04	--	2.9
31...	--	--	--	--	1.4	--	.04	--	5.9
JUL									
11...	1.1	.08	.21	.79	1.0	2.2	.11	.07	5.3
AUG									
08...	1.2	.08	.12	.64	.76	2.1	.12	.09	4.0

01458600 NISHISAKAWICK CREEK AT FRENCHTOWN, NJ

LOCATION.--Lat 40°31'27", long 75°03'42", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, and 700 ft (213 m) upstream from mouth.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
OCT 26...	1130	222	8.1	9.0	10	11.1	3.0	>24000	>2400
DEC 08...	1330	216	7.6	.0	7	16.6	3.0	1300	>2400
FEB 14...	1150	197	6.9	.0	9	13.4	--	700	>2400
MAR 15...	1150	174	7.2	11.0	8	16.4	3.0	130	350
APR 18...	1130	168	9.5	13.0	1	13.2	--	<20	11
MAY 10...	1115	179	7.4	9.0	1	11.6	--	20	5
JUN 08...	1100	249	8.1	14.0	2	7.8	1.0	80	227
JUL 07...	1150	199	8.9	21.0	1	8.8	<.5	460	110
AUG 18...	1200	212	8.7	19.0	1	9.9	1.0	230	350

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 26...	66	17	5.7	12	4.3	22	20	130	12
DEC 08...	39	9.9	3.4	8.2	1.5	11	10	74	16
FEB 14...	50	13	4.3	12	3.4	21	23	102	27
MAR 15...	49	12	4.7	9.2	1.5	26	14	111	17
APR 18...	67	18	5.4	8.2	1.6	18	11	94	2
MAY 10...	60	16	4.9	9.1	1.5	22	13	94	2
JUN 08...	58	15	4.9	10	1.7	15	14	101	0
JUL 07...	64	17	5.3	10	2.0	16	14	104	15
AUG 18...	65	17	5.5	12	2.2	16	17	117	5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 26...	--	--	--	--	1.4	--	--	--	3.6
DEC 08...	--	--	--	--	1.4	--	.05	--	5.7
FEB 14...	--	--	--	--	1.7	--	.09	--	6.2
MAR 15...	--	--	--	--	1.3	--	.05	--	9.5
APR 18...	--	--	--	--	1.0	--	.01	--	6.9
MAY 10...	--	--	--	--	1.3	--	.01	--	4.3
JUN 08...	--	--	--	--	1.1	--	.04	--	4.7
JUL 07...	.92	.01	.02	.21	.23	1.2	.03	.01	6.2
AUG 18...	1.1	.01	.01	.28	.29	1.4	.04	.04	8.0

01460500 DELAWARE AND RARITAN CANAL AT KINGSTON, NJ

LOCATION.--Lat 40°22'24", long 74°37'08", Middlesex County, Hydrologic Unit 02040105, on right bank at canal lock at Kingston, and 250 ft (76 m) upstream from new bridge on State Highway 27.

PERIOD OF RECORD.--
WATER DISCHARGE: March 1947 to current year.

GAGE.--Two water-stage recorders and concrete control. Datum of gage is 40.00 ft (12.192 m) NGVD.

REMARKS.--Discharge records good. The canal diverts water from the Delaware River at Raven Rock and discharges into Raritan River at New Brunswick. Some water wasted to the Millstone River 500 ft (152 m) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	88	90	97	83	100	100	88	81	88	83	84
2	95	87	90	96	87	102	99	85	84	90	84	79
3	94	87	93	93	88	102	96	77	87	90	86	78
4	91	88	96	93	87	100	96	77	88	88	89	84
5	86	89	96	93	86	94	100	88	90	88	88	82
6	85	88	96	93	86	97	100	91	90	88	87	81
7	83	90	96	94	85	99	97	93	90	88	86	81
8	84	90	96	94	85	98	99	91	91	85	85	80
9	81	88	96	94	85	97	98	90	94	84	84	80
10	78	87	94	94	84	94	96	90	96	83	83	80
11	81	87	94	97	84	94	97	90	91	84	80	76
12	81	88	94	96	84	96	99	88	90	87	80	71
13	91	88	93	94	84	97	99	87	91	85	80	80
14	95	88	94	96	85	100	99	88	90	84	81	83
15	94	89	96	91	85	103	99	87	90	83	85	78
16	88	88	99	88	85	103	98	87	90	81	86	78
17	86	89	97	87	84	103	96	87	90	83	82	75
18	86	89	97	85	84	103	93	85	90	83	81	79
19	93	89	96	83	84	93	93	85	88	84	80	78
20	96	90	94	81	85	94	94	85	88	83	82	75
21	103	90	94	80	87	96	94	85	85	83	85	76
22	98	89	94	79	92	96	94	81	85	83	81	76
23	92	89	94	78	94	96	94	80	87	83	84	77
24	92	90	94	80	94	102	93	77	90	80	86	78
25	91	90	96	82	106	102	93	83	90	84	82	82
26	93	90	96	85	101	100	94	84	88	85	84	85
27	92	90	93	84	102	100	94	81	88	84	85	82
28	88	90	93	83	99	100	94	80	88	84	85	81
29	86	90	97	83	---	100	94	80	88	84	85	81
30	85	90	97	83	---	99	91	81	87	83	84	79
31	86	---	94	81	---	100	---	81	---	83	84	---
TOTAL	2769	2665	2939	2737	2475	3060	2883	2632	2665	2625	2597	2379
MEAN	89.3	88.8	94.8	88.3	88.4	98.7	96.1	84.9	88.8	84.7	83.8	79.3
MAX	103	90	99	97	106	103	100	93	96	90	89	85
MIN	78	87	90	78	83	93	91	77	81	80	80	71

CAL YR 1976 TOTAL 33217 MEAN 90.8 MAX 133 MIN 66
WTR YR 1977 TOTAL 32426 MEAN 88.8 MAX 106 MIN 71

01460900 LOCKATONG CREEK NEAR RAVEN ROCK, NJ

LOCATION.--Lat 40°24'28", long 75°00'52", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, 1.1 mi (1.8 km) east of Raven Rock, and 300 ft (90 m) upstream from mouth.

DRAINAGE AREA.--23.3 mi^2 (60.3 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1956, 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)
OCT 26...	1400	162	8.7	11.0	10	10.4	4.0	5400	>2400
DEC 09...	1100	190	7.5	.0	8	12.4	4.0	1700	>2400
FEB 22...	1210	385	7.0	1.5	1	17.6	2.0	<20	<2
MAR 23...	0945	90	6.7	3.0	25	7.2	<.5	790	1600
APR 18...	1015	169	7.7	12.0	1	10.6	--	80	<2
MAY 10...	0950	154	7.4	9.0	1	11.2	1.0	170	9
JUN 08...	0950	177	7.6	13.0	1	9.7	<.5	140	240
JUL 07...	1215	206	7.4	20.0	1	4.9	1.0	3500	110
AUG 18...	1100	161	7.1	16.0	1	9.3	1.0	330	350

DATE	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT 26...	51	12	5.0	7.5	5.0	29	9.0	120	34
DEC 09...	55	13	5.5	8.1	2.8	34	11	122	13
FEB 22...	50	14	5.7	11	2.8	32	16	115	0
MAR 23...	40	9.0	3.7	4.0	2.2	19	5.0	72	41
APR 18...	53	13	5.0	8.0	2.1	28	9.6	88	0
MAY 10...	49	12	4.7	7.0	1.9	28	8.4	81	3
JUN 08...	57	14	5.4	9.7	2.3	23	10	88	8
JUL 07...	78	20	6.9	11	1.9	26	14	149	5
AUG 18...	50	12	4.9	17	2.6	22	13	118	3

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 26...	--	--	--	--	1.7	--	--	--	11
DEC 09...	--	--	--	--	1.5	--	.05	--	5.1
FEB 22...	--	--	--	--	1.5	--	.04	--	2.6
MAR 23...	--	--	--	--	1.3	--	.10	--	6.3
APR 18...	--	--	--	--	1.0	--	.01	--	6.2
MAY 10...	--	--	--	--	1.3	--	.02	--	2.8
JUN 08...	--	--	--	--	1.0	--	.01	--	5.1
JUL 07...	--	--	--	--	1.4	--	.02	--	4.7
AUG 18...	.92	.01	.01	.19	.20	1.1	.02	.01	5.7

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville.

DRAINAGE AREA.--6,598 mi² (17,089 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)
OCT									
26...	1300	116	8.3	10.0	10	11.3	1.0	1100	1600
DEC									
09...	1000	131	7.7	.0	10	12.2	3.0	790	350
FEB									
22...	1100	225	7.4	3.0	2	15.1	3.0	<20	23
APR									
05...	1000	97	6.8	7.0	30	12.4	1.0	5400	920
MAY									
02...	1000	136	7.3	13.5	2	10.3	--	220	2400
31...	1000	216	7.9	20.5	2	8.9	2.0	20	280
JUL									
11...	0945	217	7.8	24.0	1	5.5	1.0	80	5
AUG									
08...	0955	209	8.0	26.5	2	6.2	<.5	20	4

DATE	HARD-NESS (CA,MG) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT									
26...	36	9.8	2.8	4.3	1.3	17	5.7	90	10
DEC									
09...	41	11	3.2	5.7	1.2	17	8.9	76	30
FEB									
22...	73	19	6.1	11	2.1	23	15	114	0
APR									
05...	42	12	2.8	4.0	1.2	13	6.3	58	35
MAY									
02...	68	18	5.5	5.1	1.1	16	7.5	71	7
31...	87	22	7.7	8.7	1.7	27	12	156	0
JUL									
11...	77	20	6.6	9.0	1.6	25	12	141	10
AUG									
08...	78	20	6.8	9.8	2.0	24	13	99	1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
26...	--	--	--	--	1.1	--	--	--	4.4
DEC									
09...	--	--	--	--	2.0	--	.09	--	4.6
FEB									
22...	--	--	--	--	1.7	--	.10	--	2.6
APR									
05...	--	--	--	--	1.3	--	.06	--	--
MAY									
02...	--	--	--	--	1.4	--	.05	--	4.5
31...	--	--	--	--	1.4	--	.02	--	6.3
JUL									
11...	1.2	.07	.12	.58	.70	2.0	.11	.07	5.0
AUG									
08...	1.2	.06	.06	1.0	1.1	2.4	.11	.08	4.1

01461250 WICKECHOKE CREEK AT LOCKTOWN, NJ

LOCATION.--Lat 40°29'09", long 74°58'15", Hunterdon County, Hydrologic Unit 02040105, at bridge on unnamed road in Locktown, 2.4 mi (3.9 km) upstream from Plum Brook, and 3.1 mi (5.0 km) northwest of Sergentsville.

DRAINAGE AREA.--9.24 mi² (23.93 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: February to August 1977.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
FEB 14...	1300	510	7.0	.0	4	12.7	--	1300	>2400
MAR 15...	1315	425	7.1	11.0	10	20.0	1.0	790	170
APR 18...	1300	885	7.5	19.0	3	10.4	--	50	4
MAY 10...	1245	217	7.4	11.5	3	10.5	2.0	<20	130
JUN 08...	1245	9550	7.8	16.0	4	8.4	2.0	20	33
JUL 07...	1330	12000	8.5	21.5	1	8.5	3.0	3500	240
AUG 18...	1340	2570	7.8	20.0	1	8.5	1.0	130	920

DATE	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
FEB 14...	47	11	4.8	68	2.8	46	110	282	6
MAR 15...	44	10	4.5	60	2.3	47	81	237	14
APR 18...	130	40	7.0	150	2.7	69	200	463	2
MAY 10...	63	15	6.2	25	1.8	35	27	124	10
JUN 08...	330	68	38	2100	8.5	660	2900	5050	6
JUL 07...	300	66	34	2900	7.6	870	3900	1050	16
AUG 18...	83	19	8.6	440	5.0	160	650	1370	17

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 14...	--	--	--	--	1.7	--	--	--	6.6
MAR 15...	--	--	--	--	2.8	--	--	--	11
APR 18...	--	--	--	--	--	--	.03	--	5.0
MAY 10...	--	--	--	--	--	--	.02	--	4.0
JUN 08...	--	--	--	--	--	--	.02	--	4.2
JUL 07...	.30	.09	.20	.82	1.1	1.6	.04	.01	7.2
AUG 18...	.17	.00	.02	.95	.97	1.1	.03	.00	7.0

01461300 WICKECHEOKE CREEK AT STOCKTON, NJ

LOCATION.--Lat 40°24'41", long 74°59'13", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, and 900 ft (270 m) upstream from mouth.

DRAINAGE AREA.--26.5 mi² (68.6 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 26...	1500	446	8.3	11.0	15	10.9	3.0	5400	>2400	64
DEC 09...	1200	524	7.3	.0	7	14.8	5.0	16000	>2400	60
FEB 14...	1400	325	6.9	.0	8	11.2	--	460	1600	42
MAR 15...	1415	235	7.1	11.0	6	17.2	1.0	230	130	38
APR 18...	1410	250	9.2	17.5	1	11.3	--	80	33	73
MAY 10...	1410	178	8.0	11.5	1	9.7	1.0	80	<2	41
JUN 08...	1400	367	8.7	20.0	2	8.2	2.0	220	33	71
JUL 07...	1150	876	7.6	20.0	1	9.8	1.0	5400	920	100
AUG 18...	1030	1020	6.9	15.0	1	10.2	1.0	490	350	120

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT 26...	12	8.3	59	3.7	--	36	61	--	271	28
DEC 09...	14	6.1	68	2.6	--	49	82	--	282	26
FEB 14...	10	4.2	46	2.8	--	35	62	--	199	36
MAR 15...	9.2	3.6	22	2.1	--	34	33	--	139	9
APR 18...	21	4.9	24	2.2	--	34	30	--	128	2
MAY 10...	10	4.0	17	2.0	.0	31	15	9.1	117	1
JUN 08...	17	7.0	40	2.6	--	34	59	--	207	65
JUL 07...	25	9.7	140	3.5	--	54	200	--	486	5
AUG 18...	30	12	150	4.8	--	69	250	--	577	6

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 26...	--	--	--	--	1.5	--	--	--	8.6
DEC 09...	--	--	--	--	2.0	--	.04	--	5.1
FEB 14...	--	--	--	--	2.0	--	--	--	6.0
MAR 15...	--	--	--	--	2.8	--	--	--	4.7
APR 18...	--	--	--	--	--	--	.02	--	6.3
MAY 10...	--	--	--	--	--	--	.02	--	6.5
JUN 08...	--	--	--	--	--	--	.05	--	3.6
JUL 07...	1.1	.01	.16	.53	.69	1.8	.08	.02	4.8
AUG 18...	1.3	.01	.01	.29	.30	1.6	.04	.04	7.3

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
10...	1410	30	1	0	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
10...	60	3	10	.0	3	0	20	0

01461900 ALEXAUKEN CREEK NEAR LAMBERTVILLE, NJ

LOCATION.--Lat 40°22'51", long 74°56'54", Hunterdon County, Hydrologic Unit 02040105, at bridge on State Route 29, 1.1 mi (1.8 km) north of Lambertville, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--14.9 mi² (38.6 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1959-63, 1977.
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)
NOV 03...	0930	299	8.2	7.0	1	12.4	2.0	130	49
FEB 22...	1325	301	7.1	3.0	1	20.7	2.0	20	33
MAR 23...	1055	154	6.8	5.0	15	6.8	1.0	1300	280
APR 20...	1000	222	9.1	13.5	1	14.4	3.0	20	110
MAY 16...	0945	253	8.4	15.0	2	10.4	1.0	20	540
JUN 13...	1400	293	8.6	24.5	2	5.4	<.5	270	23
JUL 07...	1000	301	7.3	20.0	1	9.9	<.5	1300	170
AUG 18...	1130	289	8.1	--	1	12.6	1.0	790	130

DATE	HARDNESS (CA+MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 03...	120	29	11	11	2.7	50	17	178	6
FEB 22...	110	27	9.5	12	2.4	49	23	172	0
MAR 23...	34	8.1	3.3	4.1	1.4	24	9.7	124	24
APR 20...	97	25	8.3	8.4	2.2	37	12	170	5
MAY 16...	94	24	8.3	9.8	2.3	41	13	160	2
JUN 13...	110	28	9.8	11	2.8	49	15	191	0
JUL 07...	120	31	11	12	2.6	50	16	231	6
AUG 18...	110	27	9.2	12	2.8	45	15	189	3

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 03...	--	--	--	--	1.4	--	--	--	2.2
FEB 22...	--	--	--	--	1.4	--	.05	--	2.2
MAR 23...	--	--	--	--	1.4	--	.08	--	.0
APR 20...	--	--	--	--	1.4	--	.01	--	1.1
MAY 16...	--	--	--	--	1.4	--	.03	--	7.0
JUN 13...	--	--	--	--	1.1	--	.01	--	4.9
JUL 07...	.02	.00	.00	.17	.17	.19	.01	.00	6.3
AUG 18...	.34	.01	.01	.07	.08	1.2	.04	.03	5.1

01462000 DELAWARE RIVER AT LAMBERTVILLE, NJ

LOCATION.--Lat 40°21'53", long 74°56'57", Hunterdon County, Hydrologic Unit 02040105, at bridge connecting Lambertville, NJ, and New Hope, PA.

DRAINAGE AREA.--6,680 mi² (17,301 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 03...	1030	110	8.5	7.0	4	11.8	2.0	230	70	41
FEB 22...	1410	241	8.0	5.0	2	16.6	3.0	<20	23	73
APR 05...	1310	101	6.8	9.0	25	14.3	2.0	1300	920	45
MAY 02...	1315	134	7.5	14.0	2	10.4	--	50	>2400	46
31...	1300	221	8.8	22.0	2	7.4	3.0	<20	22	96
JUL 11...	1300	221	8.4	25.0	1	3.4	2.0	50	2	77
AUG 08...	1300	200	8.7	27.0	1	7.9	--	<20	5	78

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 03...	11	3.2	5.6	1.3	--	17	6.4	--	52	11
FEB 22...	19	6.1	14	1.8	--	29	19	--	126	0
APR 05...	12	3.7	4.5	1.4	--	14	6.8	--	63	44
MAY 02...	12	3.9	5.0	1.1	--	16	7.7	--	71	10
31...	25	8.1	9.1	1.7	.0	27	12	2.7	148	0
JUL 11...	20	6.6	9.3	1.7	--	26	12	--	141	7
AUG 08...	20	6.8	9.8	2.1	--	24	13	--	121	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 03...	--	--	--	--	1.4	--	--	--	2.4
FEB 22...	--	--	--	--	1.8	--	.09	--	2.0
APR 05...	--	--	--	--	1.1	--	.09	--	--
MAY 02...	--	--	--	--	1.1	--	.03	--	7.1
31...	--	--	--	--	1.7	--	.04	--	7.8
JUL 11...	1.2	.05	.08	.33	.41	1.7	.09	.05	4.3
AUG 08...	1.2	.05	.01	.64	.65	1.9	.12	.09	4.5

01462000 DELAWARE RIVER AT LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 31...	1300	50	2	50	0	0	0	45

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 31...	40	15	80	.5	15	0	70	2

01462005 SWAN CREEK AT LAMBERTVILLE, NJ

LOCATION.--Lat 40°21'51", long 74°56'41", Hunterdon County, Hydrologic Unit 02040105, at bridge 250 ft (76 m) upstream from Delaware-Raritan Canal, 500 ft (152 m) upstream from mouth, and 350 ft (107 m) downstream from State Route 29.

DRAINAGE AREA.--3.28 mi² (8.50 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV										
03...	1200	308	9.0	8.0	1	11.3	1.0	490	350	110
FEB										
22...	1500	383	7.4	2.0	1	16.3	6.0	<20	170	120
MAR										
23...	1200	189	7.1	6.0	8	6.6	<.5	230	350	64
APR										
20...	1130	179	8.7	14.0	2	12.0	1.0	2200	>2400	110
MAY										
16...	1105	256	8.5	14.0	1	8.7	2.0	330	920	88
JUN										
13...	1440	237	8.6	24.0	3	7.7	--	1300	1600	81
JUL										
07...	1015	362	7.0	19.0	1	9.7	1.0	16000	350	110
AUG										
18...	1230	277	7.8	17.0	6	12.3	3.0	1300	11	100

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
NOV										
03...	26	10	16	2.7	17	6.4	163	8	--	--
FEB										
22...	28	12	24	2.7	38	55	225	0	--	--
MAR										
23...	15	6.5	10	2.2	28	20	155	14	--	--
APR										
20...	31	6.8	7.2	2.0	33	11	139	0	--	--
MAY										
16...	22	8.0	13	2.6	35	19	176	6	--	--
JUN										
13...	21	7.0	12	2.6	30	16	142	3	--	--
JUL										
07...	30	9.7	16	3.1	31	28	197	20	.79	.01
AUG										
18...	27	8.4	16	3.1	27	20	164	6	.43	.01

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
NOV									
03...	--	--	1.1	7700	--	--	--	2.0	21
FEB									
22...	--	--	1.4	--	--	.05	--	2.6	--
MAR									
23...	--	--	1.1	--	--	.04	--	4.9	--
APR									
20...	--	--	1.3	--	--	.01	--	4.0	--
MAY									
16...	--	--	1.4	--	--	.02	--	5.3	--
JUN									
13...	--	--	1.1	--	--	.02	--	5.2	--
JUL									
07...	.03	.31	.34	--	1.1	.06	.04	5.8	--
AUG									
18...	.01	.28	.29	--	.73	.08	.04	7.0	--

01462005 SWAN CREEK AT LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MA- TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL CHRO- MIUM IN BOTTOM MA- TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA- TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA- TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA- TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA- TERIAL (UG/G)	TOTAL MANGA- NESE IN BOTTOM MA- TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA- TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA- TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA- TERIAL (UG/G)
NOV												
03...	1200	5	<10	25	<10	40	12000	300	450	.2	<10	160

DATE	PCB IN BOTTOM MA- TERIAL (UG/KG)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)
NOV												
03...	9	.0	40	.0	.0	.0	.5	.0	.0	.0	.0	0

01462195 MOORES CREEK NEAR LAMBERTVILLE, NJ

LOCATION.--Lat 40°20'39", long 74°53'11", Hunterdon County, Hydrologic Unit 02040105, at bridge 2.4 mi (3.9 km) north of Titusville, and 2.7 mi (4.3 km) east of Goat Hill.

DRAINAGE AREA.--4.51 mi² (11.68 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV										
03...	1300	244	7.8	8.5	1	11.0	1.0	1300	130	87
JAN										
31...	1530	261	7.6	1.0	1	14.4	--	20	<2	91
MAR										
23...	1315	146	7.0	5.0	10	9.0	<.5	170	240	56
APR										
20...	1310	238	8.7	16.0	1	13.6	2.0	20	240	100
MAY										
16...	1245	202	8.0	17.8	2	10.2	2.0	230	27	72
JUN										
14...	1400	205	7.9	21.0	3	9.8	<.5	20	240	73
JUL										
07...	1055	253	6.9	19.5	1	4.2	2.0	16000	1600	82
AUG										
18...	1300	218	8.2	19.0	2	--	2.0	--	--	78
SEP										
26...	1430	237	7.9	16.5	1	7.6	--	790	350	80

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV										
03...	28	8.9	12	2.2	--	38	14	--	139	3
JAN										
31...	21	9.3	14	1.8	--	43	15	--	161	0
MAR										
23...	14	5.0	7.5	2.0	--	25	8.7	--	112	14
APR										
20...	27	9.0	13	2.3	--	31	19	--	170	7
MAY										
16...	17	7.1	10	2.0	.0	29	9.8	9.8	121	1
JUN										
14...	17	7.3	11	2.2	--	30	10	--	126	1
JUL										
07...	20	7.7	13	2.7	--	27	12	--	151	14
AUG										
18...	19	7.3	12	2.8	--	25	9.9	--	132	54
SEP										
26...	19	7.9	12	2.6	.0	31	13	15	140	0

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV									
03...	--	--	--	--	1.1	--	--	--	2.0
JAN									
31...	--	--	--	--	1.4	--	.02	--	1.4
MAR									
23...	--	--	--	--	1.4	--	.05	--	4.8
APR									
20...	--	--	--	--	1.1	--	.01	--	1.6
MAY									
16...	--	--	--	--	1.1	--	.00	--	4.9
JUN									
14...	--	--	--	--	1.1	--	.00	--	6.0
JUL									
07...	.22	.01	.07	.37	.44	.67	.05	.02	6.4
AUG									
18...	.10	.00	.03	.97	1.0	1.1	.04	.02	6.3
SEP									
26...	.28	.00	.01	.34	.35	.63	.03	.02	--

01462195 MOORES CREEK NEAR LAMBERTVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
16...	1245	20	1	0	0	0	0	2
SEP								
26...	1430	10	0	130	0	0	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
16...	60	0	10	.0	0	0	60	0
SEP								
26...	90	0	20	<.5	4	0	10	2

01462200 MOORES CREEK NEAR TITUSVILLE, NJ

LOCATION.--Lat 40°19'26", long 74°55'02", Mercer County, Hydrologic Unit 02040105, at bridge on State Route 29, 21 mi (3.4 km) northwest of Titusville, and 400 ft (120 m) upstream from mouth.

DRAINAGE AREA.--10.2 mi² (26.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-62, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
NOV											
03...	1430	229	7.8	9.0	1	11.5	1.0	220	79	82	20
FEB											
23...	1350	230	6.8	7.0	1	10.0	1.0	50	>2400	79	19
MAR											
23...	1400	139	7.0	6.0	6	8.9	<.5	170	140	50	12
APR											
20...	1420	172	9.7	17.5	1	11.0	1.0	<20	240	160	53
MAY											
16...	1400	194	8.2	20.0	3	8.2	3.0	<20	40	70	18
JUN											
14...	1445	229	8.3	22.0	2	8.2	1.0	330	13	75	19
JUL											
18...	1045	318	7.8	25.0	1	5.6	--	230	170	120	35
SEP											
01...	0950	252	7.8	20.0	1	5.4	--	790	>2400	85	22
26...	1345	234	8.1	16.5	1	7.9	--	1700	79	79	20

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
NOV										
03...	7.9	10	2.1	.0	36	12	14	130	4	--
FEB										
23...	7.6	11	1.9	--	30	10	--	119	0	--
MAR										
23...	4.9	6.9	2.0	--	25	7.6	--	109	11	--
APR										
20...	6.7	8.5	1.9	--	29	8.4	--	118	0	--
MAY										
16...	6.2	9.5	2.2	--	29	9.3	--	123	10	--
JUN										
14...	6.6	13	2.4	--	31	13	--	141	0	--
JUL										
18...	8.0	19	3.5	--	39	19	--	202	12	3.0
SEP										
01...	7.2	15	2.7	--	30	16	--	139	3	1.1
26...	7.1	12	2.6	--	32	12	--	141	0	1.3

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
NOV										
03...	--	--	--	1.1	340	--	--	--	1.2	4.9
FEB										
23...	--	--	--	1.1	--	--	.08	--	1.6	--
MAR										
23...	--	--	--	1.3	--	--	.02	--	3.2	--
APR										
20...	--	--	--	1.1	--	--	.04	--	1.3	--
MAY										
16...	--	--	--	2.2	--	--	.09	--	8.1	--
JUN										
14...	--	--	--	1.3	--	--	.04	--	5.9	--
JUL										
18...	.01	.10	.72	.82	--	3.8	.67	.01	5.8	--
SEP										
01...	.01	.04	.33	.37	--	1.5	.17	.14	7.2	--
26...	.01	.01	.26	.27	--	1.6	.12	.10	9.5	--

01462200 MOORES CREEK NEAR TITUSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
NOV 03...	1430	60	60	0	1	23	4	0	<10	25	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)
NOV 03...	0	<10	4	20	40	20	16000	6	<10	20

DATE	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
NOV 03...	500	.0	.1	2	<10	0	20	60	0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
NOV 03...	0	.0	.0	.0	.0	.0	.0	.0	.0	0

01462500 DELAWARE RIVER AT WASHINGTON CROSSING, NJ

LOCATION.--Lat 40°17'20", long 74°52'08", Mercer County, Hydrologic Unit 02040105, at bridge at Washington Crossing.

DRAINAGE AREA.--6,735 mi² (17,444 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)
OCT 07...	1400	163	7.9	16.0	6	--	1.0	<20	240	51	13
DEC 09...	1330	135	7.7	.5	15	14.8	3.0	1100	1600	44	12
FEB 23...	1500	229	8.0	9.0	2	16.0	2.0	<20	13	73	19
APR 05...	1420	100	6.8	10.0	30	10.5	2.0	700	1600	33	8.5
MAY 02...	1435	137	7.4	14.0	2	10.8	--	170	240	45	12
31...	1400	216	9.1	22.0	3	8.4	2.0	<20	<2	87	22
JUL 11...	1400	221	8.6	25.0	1	5.1	--	20	2	80	21
AUG 08...	1415	202	8.7	27.0	1	9.3	1.0	80	79	80	21

DATE	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 07...	4.4	6.9	1.4	.0	19	10	4.5	98	16	--
DEC 09...	3.4	6.6	1.2	--	18	11	--	73	34	--
FEB 23...	6.1	11	1.8	--	24	17	--	111	8	--
APR 05...	2.8	4.2	1.3	--	14	5.8	--	51	52	--
MAY 02...	3.6	5.3	1.1	--	17	7.4	--	86	2	--
31...	7.7	9.3	1.8	.0	27	12	2.6	149	0	--
JUL 11...	6.0	9.7	1.7	--	26	12	--	130	9	1.3
AUG 08...	6.7	9.6	2.0	--	24	13	--	114	0	1.2

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	--	1.4	600	--	--	--	--	12
DEC 09...	--	--	--	1.6	--	--	.08	--	6.1	--
FEB 23...	--	--	--	1.7	--	--	.09	--	4.5	--
APR 05...	--	--	--	1.4	--	--	.12	--	--	--
MAY 02...	--	--	--	1.1	--	--	.00	--	4.0	--
31...	--	--	--	1.4	--	--	.06	--	6.9	--
JUL 11...	.04	.10	.45	.55	--	1.8	.11	.04	4.7	--
AUG 08...	.03	.02	1.1	1.1	--	2.3	.12	.08	5.2	--

01462500 DELAWARE RIVER AT WASHINGTON CROSSING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 07...	1400	160	120	40	1	12	30	2	0	24	0
MAY 31...	1400	--	--	50	1	--	30	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 07...	1	2	70	9	350	70	9300	29	25	490
MAY 31...	0	--	100	--	--	30	--	48	--	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 07...	.0	.0	220	16	0	120	320	--	10	.0
MAY 31...	.0	--	8	--	0	120	--	2	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 07...	4	1.6	2.1	5.0	.3	.0	.0	.0	.0	0
MAY 31...	--	--	--	--	--	--	--	--	--	--

01463500 DELAWARE RIVER AT TRENTON, NJ

(National stream quality accounting network, Pesticide program, and Radiochemical program station)

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, on left bank 450 ft (137 m) upstream from Calhoun Street Bridge at Trenton, 0.5 mi (0.8 km) upstream from Assunpink Creek, and at mile 134.5 (216.4 km).

DRAINAGE AREA.--6,780 mi² (17,560 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1913 to current year. October 1912 to February 1913 monthly discharge only, published in WSP 1302. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.
CHEMICAL ANALYSES: Water years 1945 to current year.
SEDIMENT ANALYSES: Water years 1948 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: February 1913 to current year.
SPECIFIC CONDUCTANCE: June 1968 to current year.
pH: June 1968 to current year.
WATER TEMPERATURES: October 1944 to current year.
DISSOLVED OXYGEN: October 1962 to current year.
SUSPENDED-SEDIMENT DISCHARGE: September 1949 to current year.

REVISED DISCHARGE RECORDS.--WSP 951: Drainage area. WSP 1302: 1913-20. WSP 1382: 1924, 1928.

GAGE.--Water-stage recorder. Datum of gage is NGVD. Prior to Sept. 30, 1965, at datum 7.77 ft (2.368 m) higher. Feb. [illegible], 1913, to Oct. 2, 1928, nonrecording gage on downstream side of highway bridge at site 500 ft (152 m) downstream.

INSTRUMENTATION.--Temperature recorder since October 1944, water-quality recorder since October 1962.

REMARKS.--Discharge records excellent except those from Dec. 14 to Feb. 24, which are good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lakes Wallenpaupack and Hopatcong, and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, Neversink, and Wild Creek Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs and to Delaware and Raritan Canal (see Delaware River Basin, diversions). Water diverted just above station by borough of Morrisville, PA, and city of Trenton for municipal supply (see Delaware River Basin, diversions). Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism, or numerous accidental electral power shutoffs.

COOPERATION.--Selected water-quality samples, collected and analyzed by Pennsylvania Department of Environmental Resources.

AVERAGE DISCHARGE.--65 years, 11,670 ft³/s (330.5 m³/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50,000 ft³/s (1,420 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Elevation (ft)	Elevation (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Elevation (ft)	Elevation (m)
Oct. 11	0115	63200	1790	15.13	4.612	Mar. 23	1300	69000	1954	15.57	4.746
Mar. 6	0330	60000	1699	14.88	4.535	Apr. 1	1045	55800	1580	14.55	4.435
Mar. 15	1045	*117000	3313	18.75	5.715	Apr. 5	0915	61200	1733	14.98	4.566

Minimum daily discharge, 2,200 ft³/s (62.3 m³/s) Feb. 1; minimum gage height, 7.78 ft (2.371 m) July 30.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 329,000 ft³/s (9,320 m³/s) Aug. 20, 1955 (elevation, 28.60 ft or 8.717 m, from high-water mark in gage house) from rating curve extended above 230,000 ft³/s (6,510 m³/s); minimum, 1,180 ft³/s (33.4 m³/s) Oct. 31, 1963, elevation, 7.26 ft (2.213 m). Flow in Delaware and Raritan Canal not included.
SPECIFIC CONDUCTANCE: Maximum, 400 micromhos Jan. 24, 1959; minimum, 50 micromhos Mar. 19, 1945.
pH: Maximum, 10.2 July 5, 6, 1971, June 14, 15, 1974; minimum, 5.3 June 22, 1972.
WATER TEMPERATURES: Maximum 34.0°C June 18, 1957; minimum 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 17.3 mg/L July 9, 1974; minimum, 4.0 mg/L Nov. 9, 1972.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,720 mg/L Nov. 26, 1950; minimum daily, less than 0.5 mg/L Oct. 21, 1952 and Jan. 18, 1970.
SEDIMENT LOADS: Maximum daily, 1,087,000 tons (986,126 tonnes) Aug. 20, 1955; minimum daily, less than 0.5 ton (0.45 tonne) Oct. 21, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1903, reached an elevation of about 28.5 ft (8.69 m) NGVD discharge estimated, 295,000 ft³/s (8,350 m³/s). Maximum elevation since 1903, 30.6 ft (9.33 m) NGVD, Mar. 8, 1904, from floodmark (ice jam).

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6890	19900	6230	3350	2200	27900	54200	17100	3690	4230	3410	3320
2	6440	21900	6120	3600	3160	26000	45500	14600	3760	3960	3380	3060
3	6510	19800	5620	3700	3000	21600	44700	13900	3790	3760	3440	3170
4	6830	17400	4760	4200	2770	21400	50600	13900	3530	3560	4930	2970
5	7940	16400	4810	4900	2720	47700	54700	13900	3380	3020	4130	3030
6	8150	16100	4670	4450	2920	55900	51700	15200	3230	2960	3560	2670
7	6910	14900	4860	4000	3520	43700	46100	19000	3890	3080	3410	2640
8	6420	13900	17200	3500	3940	33100	39400	17200	3960	3560	3350	2810
9	7400	13200	17400	4050	4670	26900	33100	14900	4160	4130	3410	3140
10	34300	12700	15800	4250	4730	23900	27800	14400	4820	4160	3960	2990
11	50700	11500	14000	3300	4080	22800	24300	15900	7100	3890	4410	2730
12	29500	10700	12400	3900	4270	23000	22100	15500	8050	3790	4090	2730
13	21700	10400	11100	3650	4850	26400	20300	14900	6280	6950	3660	2670
14	18900	9990	8000	4150	5670	72900	18800	14100	5050	4560	3960	2520
15	18100	9210	7700	4750	5300	107000	17300	13700	4230	4060	3560	2940
16	16200	8890	7950	4150	5050	69800	15800	12400	4270	3850	3200	2850
17	13000	8750	8250	2950	5270	50100	13900	11600	4130	4170	3320	3420
18	11500	8490	7600	2500	5270	40000	11700	10500	3890	3350	3560	4200
19	10600	8030	6800	4450	4970	33600	10800	9800	3820	3630	3760	5280
20	11200	7720	6300	4350	4440	28700	10700	9800	3850	3960	3320	5880
21	14500	7330	6150	4250	4150	24300	10100	9380	4020	4970	3200	5320
22	33000	7290	4500	4000	3970	31400	9140	8960	4480	4300	3530	8150
23	35500	7090	5650	3650	4050	62900	8400	7400	4780	4300	3720	10800
24	25900	6940	6550	3750	4930	50100	8550	6550	4740	3470	3320	9140
25	22000	6710	5000	3550	32200	38200	17000	6190	4300	2860	3600	9320
26	23200	6370	4700	4400	26100	31100	29700	5920	4300	3170	3500	19700
27	26200	5690	4400	3650	24400	26500	30000	5660	4890	3020	3320	39600
28	23800	5560	3950	3050	27700	23600	26100	5160	4560	2670	3240	39000
29	20400	5480	4700	2950	---	24100	23300	4340	4340	2440	2580	24500
30	18100	5670	4250	2750	---	28300	20000	3960	4340	2580	2490	17700
31	16800	---	4350	2250	---	47700	---	3760	---	2990	2640	---
TOTAL	558590	324010	231770	116400	210300	1190600	795790	349580	133630	115400	108960	248250
MEAN	18020	10800	7476	3755	7511	38410	26530	11280	4454	3723	3515	8275
MAX	50700	21900	17400	4900	32200	107000	54700	19000	8050	6950	4930	39600
MIN	6420	5480	3950	2250	2200	21400	8400	3760	3230	2440	2490	2520

CAL YR 1976 TOTAL 4694260 MEAN 12830 MAX 99600 MIN 3280
WTR YR 1977 TOTAL 4383280 MEAN 12010 MAX 107000 MIN 2200

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)
OCT												
22...	0930	25900	135	7.6	9.5	7	11.6	2.6	730	--	47	22
NOV												
22...	1000	7420	165	7.6	1.0	1	14.6	1.0	50	86	59	21
DEC												
26...	1100	E3950	191	8.5	.5	1	14.4	1.0	8200	--	63	23
MAR												
09...	1210	26600	107	7.6	4.5	6	12.6	1.6	450	170	32	13
14...	1415	74900	120	7.3	--	80	--	--	--	--	39	18
APR												
27...	1045	28500	105	7.5	12.0	8	10.2	6.4	--	3800	41	21
MAY												
09...	1120	14900	136	7.8	14.0	3	10.0	2.4	47	160	47	21
JUN												
08...	1030	4090	236	8.6	19.5	2	10.8	4.5	63	1600	87	32
JUL												
22...	1135	4090	181	8.9	29.5	1	9.6	5.7	23	2600	74	30
AUG												
10...	0940	4240	226	8.1	27.0	1	7.8	2.0	877	5400	83	38
SEP												
08...	1100	2950	234	8.1	24.0	10	8.2	3.5	66	1000	87	41

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT											
22...	13	3.6	4.7	1.5	31	0	25	1.2	19	7.2	.1
NOV											
22...	15	5.2	5.7	1.1	46	0	38	1.8	22	9.8	.1
DEC											
28...	15	6.3	7.7	1.3	49	--	40	.2	23	11	.1
MAR											
09...	8.4	2.6	4.6	1.3	23	0	19	.9	15	7.8	.1
14...	10	3.4	5.1	1.6	25	0	21	2.0	17	8.0	.1
APR											
27...	11	3.2	4.8	1.1	24	0	20	1.2	14	6.4	.0
MAY											
09...	11	4.7	5.4	1.3	32	0	26	.8	17	7.4	.0
JUN											
08...	22	7.7	10	1.8	67	--	55	.3	27	13	.1
JUL											
22...	19	6.4	9.4	1.8	54	--	44	.1	24	13	.1
AUG											
10...	21	7.5	10	2.3	55	--	45	.7	27	13	.1
SEP											
08...	23	7.1	10	1.9	56	--	46	.7	28	14	.1

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT											
22...	4.0	73	81	32	.66	.09	.49	.58	1.2	.09	3.0
NOV											
22...	3.5	93	--	14	.82	.20	.22	.42	1.2	.08	7.8
DEC											
28...	2.9	97	--	2	.98	.34	.26	.60	1.6	.07	3.4
MAR											
09...	4.2	76	--	24	.77	.12	.31	.43	1.2	.06	2.5
14...	4.3	66	--	289	.81	.15	1.5	1.7	2.5	.19	8.0
APR											
27...	3.6	67	70	27	.56	.09	.50	.59	1.2	.06	4.0
MAY											
09...	1.3	65	--	5	.59	.02	.41	.43	1.0	.05	4.9
JUN											
08...	3.8	156	--	--	1.4	--	--	1.1	2.5	.11	--
JUL											
22...	3.0	139	--	13	.95	.01	.86	.87	1.8	.24	7.1
AUG											
10...	3.4	135	--	8	1.3	.01	.64	.65	2.0	.14	3.8
SEP											
08...	2.6	123	--	13	1.3	.02	.48	.50	1.8	.16	4.9

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV											
22...	1000	1	0	1	0	0	0	20	20	0	0
MAR											
09...	1210	0	0	0	4	1	3	40	31	9	0
14...	1415	5	4	1	5	4	1	20	20	0	0
MAY											
09...	1120	1	0	1	0	0	0	<10	<3	7	0
AUG											
10...	0940	--	--	0	--	--	3	--	--	1	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)
NOV											
22...	0	0	8	6	2	130	70	9	3	6	40
MAR											
09...	0	0	4	1	3	710	50	7	2	5	80
14...	0	0	22	18	4	9500	40	40	36	4	460
MAY											
09...	0	0	5	2	3	230	70	7	4	3	40
AUG											
10...	--	0	--	--	6	--	20	--	--	5	--

DATE	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV											
22...	0	40	.2	.2	.0	0	0	0	60	10	50
MAR											
09...	40	40	.0	.0	.0	0	0	0	60	30	30
14...	430	30	.4	.4	.0	0	0	0	220	210	10
MAY											
09...	20	20	.0	.0	.0	0	0	0	30	10	20
AUG											
10...	--	0	--	--	--	--	--	0	--	--	10

DATE	TIME	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
OCT									
22...	0930	<1.5	2.2	3.3	3.2	2.6	3.0	.07	.02
APR									
27...	1045	<1.0	.8	3.3	1.5	2.6	1.3	.07	.05

DATE	TIME	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ATRA-ZINE (UG/L)	ATRA-ZINE IN BOTTOM MATERI-AL (UG/KG DRY SOLIDS)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	P,P' DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)
NOV										
22...	1000	ND	ND	ND	ND	ND	2	ND	1.2	ND
MAR										
09...	1210	--	--	ND	--	--	--	--	--	--
MAY										
09...	1120	ND	ND	ND	ND	ND	40	ND	6.1	ND
AUG										
10...	0940	ND	--	ND	--	ND	--	ND	--	ND

DATE	P,P' DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	P,P' DDT IN BOTTOM MA-TERIAL (UG/KG)	O,P' DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	DI-AZINON IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)
NOV										
22...	.8	ND	2.1	1.2	ND	ND	ND	.1	ND	ND
MAR										
09...	--	--	--	--	ND	--	--	--	--	--
MAY										
09...	6.2	ND	40	4.5	ND	ND	ND	.5	ND	ND
AUG										
10...	--	ND	--	--	ND	--	ND	--	ND	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	MALATHION IN BOTTOM MATERIAL (UG/KG)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 09...	ND	--	--	--	--	--	--	--	ND	--
MAY 09...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 10...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TOTAL METHOXYCHLOR (UG/L)	METHOXYCHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL TRITHION (UG/L)	METHYL TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL PARATHION (UG/L)	PARATHION IN BOTTOM MATERIAL (UG/KG)	SIMAZINE TOTAL COULSON COND. (UG/L)	SIMAZINE IN BOTTOM MATERIAL (UG/KG DRY SOLIDS)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 09...	--	--	ND	--	ND	--	ND	--	ND	--
MAY 09...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 10...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MATERIAL (UG/KG)
NOV 22...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 09...	--	--	ND	--	ND	--	ND	--	ND	--
MAY 09...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 10...	ND	--	ND	--	ND	--	ND	--	ND	--

PARTICLE SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
MAR 14...	1415	75000	309	62600	25	39	52

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
MAR 14...	65	77	84	92	98	99	100

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

PERIPHYTON

Date	Time	Length of exposure (days)	Biomass (mg/m²) Dry weight	Biomass (mg/m²) Ash weight	Chlorophyll a* (mg/m²)	Chlorophyll b* (mg/m²)	Biomass chlorophyll ratio	Sampling method
Nov 22		31	5038	4231	3.03	2.26	266	Polyethylene strip
Jul 22	1100	41	--	--	10.7	6.56	--	
	1105	41	21100	11200	10.8	12.3	917	
	1110	41	21700	11500	6.04	7.57	1690	
Sep 16	1000	41	17300	13900	3.62	4.35	939	
	1001	41	11700	9840	1.29	0.346	1440	
	1002	41	8660	7320	1.08	0.079	1240	
	1003	41	4490	3300	0.329	0.057	3620	

* Chlorophyll determinations in November were performed using the chromatographic-spectrophotometric technique, in June and July determinations were performed using the chromatographic-fluorometric technique.

PHYTOPLANKTON ANALYSES

DATE	OCT 22,76	NOV 22,76	DEC 28,76	MAR 9,77	MAY 9,77
TIME	0930	1000	1100	1210	1120
TOTAL CELLS/ML	710	500	1000	1000	6000
DIVERSITY: DIVISION	1.4	1.0	1.0	1.0	1.4
.CLASS	1.4	1.0	1.0	1.0	1.4
..ORDER	1.8	1.6	1.1	1.0	2.4
...FAMILY	3.0	1.9	2.3	2.4	2.9
....GENUS	3.2	2.1	2.4	2.6	3.2

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	--	-	--	-	--	-
....SORASTRUM	--	-	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-	190	3
...OOCYSTACEAE										
....ANKISTRODESMUS	12	2	--	-	9	1	6	1	*	0
....CHODATELLA	--	-	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	*	0
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	*	0
....TETRAEDRON	--	-	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-	--	-
....WESTELLA	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	96	14	--	-	18	2	--	-	330	5
....TETRASTRUM	--	-	--	-	--	-	--	-	--	-
..TETRASPORALES										
...COCCOMYXACEAE										
....ELAKATOTHRIX	--	-	--	-	--	-	--	-	--	-
...PALMELLACEAE										
....GLOEOCYSTIS	--	-	--	-	--	-	--	-	--	-
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	*	0
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	82	1
...VOLVOCACEAE										
....PANDORINA	--	-	--	-	--	-	--	-	220	4
..ZYGNEMATALES										
...DESMIDIACEAE										
....COSMARIUM	--	-	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE TIME	OCT 22,76 0930		NOV 22,76 1000		DEC 28,76 1100		MAR 9,77 1210		MAY 9,77 1120	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	36	5	32	5	12	1	--	-	1100#	19
....MELOSIRA	24	3	67	11	15	1	--	-	190	3
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	24	3	--	-	6	1	30	3	*	0
....COCCONEIS	--	-	11	2	*	0	6	1	*	0
....RHOICOSPHENIA	12	2	7	1	*	0	--	-	*	0
...CYMBELLACEAE										
....AMPHORA	12	2	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	6	1	48	5	*	0
...DIATOMACEAE										
....DIATOMA	12	2	7	1	*	0	60	6	*	0
...EUNOTIACEAE										
....EUNOTIA	12	2	--	-	*	0	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	--	-	9	1	6	1	300	5
....FRAGILARIA	--	-	--	-	60	6	66	7	--	-
....HANNAEA	--	-	--	-	--	-	6	1	*	0
....SYNEDRA	48	7	--	-	18	2	100	10	790	13
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	12	1	18	2	*	0
...MERIDIONACEAE										
....MERIDION	--	-	--	-	*	0	24	2	--	-
...NAVICULACEAE										
....FRUSTULIA	12	2	--	-	--	-	--	-	--	-
....NAVICULA	60	8	18	3	30	3	66	7	190	3
....NEIDIUM	--	-	--	-	--	-	--	-	--	-
....PINNULARIA	--	-	11	2	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	72	10	46	8	69	7	30	3	220	4
...SURIRELLACEAE										
....SURIRELLA	36	5	--	-	9	1	18	2	*	0
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....DINOBRYON	--	-	--	-	*	0	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	32	5	--	-	--	-	550	9
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	240#	34	--	-	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	370#	35	520#	51	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	350#	60	400#	38	--	-	1600#	27
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONODACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	--	-	4	1	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

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best available copy.

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE	JUN 8,77	JUL 22,77	AUG 10,77	SEP 8,77
TIME	1030	1135	0940	1100
TOTAL CELLS/ML	57000	67000	16000	14000
DIVERSITY: DIVISION	0.9	1.1	0.8	1.4
.CLASS	0.9	1.1	0.8	1.4
..ORDER	1.2	1.3	1.7	1.6
...FAMILY	2.5	1.9	2.7	1.9
....GENUS	3.9	2.6	2.8	2.2

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	*	0	--	-
...COELASTRACEAE								
....COELASTRUM	2200	4	1600	2	950	6	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	2500	4	*	0	1300	8	--	-
....SORASTRUM	--	-	*	0	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	310	1	--	-	--	-	--	-
....MICRACTINIUM	1300	2	*	0	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	4100	7	1000	2	240	1	120	1
....CHODATELLA	520	1	--	-	--	-	--	-
....DICTYOSPHAERIUM	6300	11	1000	2	1000	6	--	-
....KIRCHNERIELLA	520	1	10000#	15	240	1	1000	7
....OOCYSTIS	2300	4	*	0	--	-	--	-
....SELENASTRUM	1100	2	1000	2	--	-	--	-
....TETRAEDRON	830	1	*	0	--	-	--	-
....TREUBARIA	720	1	--	-	--	-	--	-
....WESTELLA	--	-	2600	4	--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	3500	6	800	1	--	-	--	-
....CRUCIGENIA	5800	10	1600	2	--	-	620	5
....SCENEDESMUS	8400	15	17000#	25	6100#	37	4900#	36
....TETRASTRUM	2500	4	800	1	--	-	--	-
..TETRASPORALES								
...COCCOMYXACEAE								
....ELAKATOTHRIX	--	-	400	1	--	-	--	-
...PALMELLACEAE								
....GLOEOCYSTIS	--	-	600	1	--	-	250	2
....SPHAEROCYSTIS	--	-	--	-	3900#	24	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	2800	5	*	0	--	-	--	-
...VOLVOCACEAE								
....PANDORINA	--	-	--	-	--	-	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....COSMARIUM	--	-	--	-	220	1	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%

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QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

PHYTOPLANKTON ANALYSES--Continued

DATE	JUN 8,77		JUL 22,77		AUG 10,77		SEP 8,77	
TIME	1030		1135		0940		1100	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	1700	3	800	1	*	0	710	5
....MELOSIRA	*	0	--	-	*	0	--	-
....STEPHANODISCUS	--	-	--	-	100	1	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	*	0	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	--	-	--	-
....CYMBELLA	410	1	*	0	--	-	*	0
...DIATOMACEAE								
....DIATOMA	*	0	--	-	--	-	--	-
...EUNOTIACEAE								
....EUNOTIA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-
....HANNAEA	--	-	--	-	--	-	--	-
....SYNEDRA	*	0	--	-	280	2	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....FRUSTULIA	--	-	--	-	--	-	--	-
....NAVICULA	--	-	--	-	220	1	120	1
....NEIDIUM	*	0	--	-	--	-	--	-
....PINNULARIA	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	620	1	600	1	*	0	280	2
...SURIRELLACEAE								
....SURIRELLA	--	-	*	0	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....DINOBRYON	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROCCOCCALES								
...CHROCCOCCAEAE								
....ANACYSTIS	8000	14	27000#	40	1000	6	5500#	41
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	670	4	--	-
....APHANIZOMENON	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.CRYPTOPHYCEAE								
..CRYPTOMONIDALES								
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	*	0
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977--Continued

BENTHIC INVERTEBRATE ANALYSES

DATE	JUL 22,77	JUL 22,77	JUL 22,77	SEP 16,77	SEP 16,77
TIME	1100	1105	1110	1000	1001
TOTAL COUNT	434	1167	744	237	62
DIVERSITY: PHYLUM	0.0	0.0	0.0	0.3	0.0
.CLASS	0.0	0.0	0.0	0.7	0.0
..ORDER	0.0	0.0	0.0	0.0	1.9
...FAMILY	0.0	0.0	0.0	0.0	0.0
....GENUS	0.0	0.0	0.0	0.0	0.0
....GENUS-INSECTA	0.0	0.0	0.0	0.0	0.0
ORGANISM	COUNT	COUNT	COUNT	COUNT	COUNT
ANNELIDA					
.HIRUDINEA	--	--	--	9	--
.OLIGOCHAETA	--	--	--	1	--
ARTHROPODA (ARTHROPODS)					
.ARACHNOIDEA					
..HYDRACARINA	--	4	2	--	--
.CRUSTACEA					
..AMPHIPODA	20	7	22	17	--
..CYCLOPOIDA					
...CYCLOPIDAE	--	--	0	2	--
..PODOCOPA	2	--	13	3	--
.INSECTA					
..COLEOPTERA					
...ELMIDAE	4	11	7	1	1
..DIPTERA					
...CHIRONOMIDAE	394	978	670	65	20
...EMPIDIDAE	--	1	--	--	--
..EPHEMEROPTERA	4	4	11	29	18
..TRICHOPTERA	9	160	18	107	20
..ODONATA					
...COENAGRIONIDAF	--	1	--	3	3
NEMATODA (NEMATODES)	1	1	1	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	171	163	165	130	126	129	---	---	---	---	---	---
2	169	153	162	126	115	119	---	---	---	---	---	---
3	184	161	176	117	113	115	---	---	---	---	---	---
4	184	163	173	119	116	117	---	---	---	---	---	---
5	183	161	170	---	---	---	---	---	---	---	---	---
6	160	155	---	---	---	---	---	---	---	195	190	193
7	---	---	---	---	---	---	---	---	---	189	185	187
8	---	---	---	---	---	---	---	---	---	192	187	189
9	---	---	---	---	---	---	---	---	---	204	193	198
10	---	---	---	---	---	---	---	---	---	207	204	205
11	---	---	---	---	---	---	---	---	---	208	202	205
12	---	---	---	---	---	---	---	---	---	211	209	210
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	146	138	---	161	155	---	---	---	---
17	---	---	---	160	146	153	163	157	160	---	---	---
18	---	---	---	161	157	---	163	151	158	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	128	124	---	---	---	---	---	---	---	---	---	---
21	131	123	---	---	---	---	175	170	---	225	215	219
22	---	---	---	---	---	---	179	166	174	217	214	215
23	---	---	---	---	---	---	---	---	---	215	211	213
24	---	---	---	---	---	---	---	---	---	215	212	214
25	---	---	---	---	---	---	---	---	---	237	213	219
26	---	---	---	---	---	---	---	---	---	215	209	212
27	---	---	---	---	---	---	---	---	---	218	208	212
28	---	---	---	---	---	---	---	---	---	227	211	217
29	115	110	113	---	---	---	---	---	---	224	221	223
30	117	113	115	---	---	---	---	---	---	233	225	220
31	124	126	118	---	---	---	---	---	---	236	232	234
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	235	227	231	---	---	---	---	---	---	120	109	114
2	252	234	239	---	---	---	---	---	---	134	119	125
3	251	242	247	---	---	---	---	---	---	140	131	135
4	258	247	251	---	---	---	---	---	---	134	126	131
5	258	243	249	---	---	---	---	---	---	144	125	131
6	251	247	250	---	---	---	---	---	---	148	137	142
7	268	254	262	---	---	---	---	---	---	142	130	---
8	274	262	268	---	---	---	---	---	---	---	---	---
9	263	233	249	---	---	---	---	---	---	---	---	---
10	249	223	231	---	---	---	---	---	---	---	---	---
11	240	208	222	---	---	---	130	127	---	---	---	---
12	234	209	220	---	---	---	133	127	130	---	---	---
13	234	222	227	---	---	---	134	130	132	---	---	---
14	240	225	231	---	---	---	137	134	---	---	---	---
15	244	225	230	---	---	---	---	---	---	---	---	---
16	247	226	240	---	---	---	---	---	---	---	---	---
17	247	242	245	---	---	---	---	---	---	---	---	---
18	247	226	240	---	---	---	---	---	---	---	---	---
19	230	211	219	---	---	---	---	---	---	---	---	---
20	226	211	218	---	---	---	---	---	---	---	---	---
21	232	223	226	---	---	---	---	---	---	---	---	---
22	235	221	229	---	---	---	---	---	---	---	---	---
23	234	218	228	---	---	---	---	---	---	---	---	---
24	252	191	225	---	---	---	---	---	---	---	---	---
25	235	174	195	---	---	---	---	---	---	---	---	---
26	206	195	---	---	---	---	---	---	---	---	---	---
27	174	155	163	---	---	---	---	---	---	---	---	---
28	---	---	---	139	132	---	105	97	---	---	---	---
29	---	---	---	138	132	135	108	96	100	---	---	---
30	---	---	---	132	122	127	116	108	111	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	274	155	232	---	---	---	---	---	---	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	201	178	191	174	170	---	224	213	220
2	---	---	---	215	186	191	---	---	---	227	188	203
3	---	---	---	190	167	184	---	---	---	189	181	185
4	---	---	---	188	172	---	---	---	---	185	179	181
5	---	---	---	---	---	---	---	---	---	181	174	178
6	---	---	---	---	---	---	---	---	---	189	175	180
7	---	---	---	---	---	---	---	---	---	190	181	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	185	159	---	---	---	---
16	---	---	---	---	---	---	199	166	181	---	---	---
17	---	---	---	---	---	---	203	185	195	---	---	---
18	---	---	---	182	179	---	214	198	203	---	---	---
19	---	---	---	196	183	190	214	194	203	---	---	---
20	---	---	---	202	179	194	211	204	208	---	---	---
21	---	---	---	180	171	176	218	207	212	---	---	---
22	---	---	---	179	165	174	220	199	205	---	---	---
23	---	---	---	170	161	167	209	198	203	---	---	---
24	---	---	---	171	164	167	216	197	207	---	---	---
25	---	---	---	172	160	166	222	205	213	---	---	---
26	---	---	---	214	174	---	206	199	202	---	---	---
27	---	---	---	---	---	---	202	192	196	102	95	---
28	---	---	---	---	---	---	---	---	---	95	77	81
29	185	178	---	175	161	---	194	191	---	110	77	---
30	205	186	193	181	167	172	228	215	221	114	111	---
31	---	---	---	193	172	182	226	212	223	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	274	77	190									

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	7.5	7.6	7.7	7.6	7.7	---	---	---	---	---	---
2	7.7	7.4	7.5	7.7	7.6	7.7	---	---	---	---	---	---
3	7.8	7.5	7.6	7.7	7.6	7.6	---	---	---	---	---	---
4	7.5	7.2	7.4	7.8	7.6	7.6	---	---	---	---	---	---
5	7.3	7.1	7.2	---	---	---	---	---	---	---	---	---
6	7.3	7.1	---	---	---	---	---	---	---	8.5	8.3	8.4
7	---	---	---	---	---	---	---	---	---	8.4	8.0	8.2
8	---	---	---	---	---	---	---	---	---	8.6	8.2	8.4
9	---	---	---	---	---	---	---	---	---	8.5	8.2	8.4
10	---	---	---	---	---	---	---	---	---	8.4	8.0	8.1
11	---	---	---	---	---	---	---	---	---	8.5	8.2	8.4
12	---	---	---	---	---	---	---	---	---	8.6	8.4	8.5
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	8.0	7.5	---	---	---	---
17	---	---	---	---	---	---	7.9	7.5	7.6	---	---	---
18	---	---	---	---	---	---	8.0	7.6	7.8	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	7.9	7.7	---	---	---	---	---	---	---	---	---	---
21	7.8	7.7	---	---	---	---	---	---	---	8.4	8.2	8.3
22	---	---	---	---	---	---	---	---	---	8.3	8.1	8.2
23	---	---	---	---	---	---	---	---	---	8.3	8.1	8.2
24	---	---	---	---	---	---	---	---	---	8.1	7.9	8.0
25	---	---	---	---	---	---	---	---	---	7.9	7.8	7.9
26	---	---	---	---	---	---	---	---	---	8.1	7.8	7.9
27	---	---	---	---	---	---	---	---	---	8.3	7.9	8.1
28	---	---	---	---	---	---	---	---	---	8.4	8.0	8.1
29	7.7	7.5	7.6	---	---	---	---	---	---	8.8	8.2	8.4
30	7.7	7.6	7.7	---	---	---	---	---	---	8.6	8.3	8.4
31	7.9	7.6	7.7	---	---	---	---	---	---	8.4	8.2	8.3
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.5	8.1	8.3	---	---	---	---	---	---	7.6	7.2	7.4
2	8.5	8.0	8.2	---	---	---	---	---	---	7.8	7.3	7.5
3	8.3	8.1	8.2	---	---	---	---	---	---	8.1	7.3	7.5
4	8.2	7.9	8.0	---	---	---	---	---	---	8.1	7.5	7.8
5	8.3	7.9	8.0	---	---	---	---	---	---	8.0	7.5	7.7
6	---	---	---	---	---	---	---	---	---	7.8	7.7	7.7
7	---	---	---	---	---	---	---	---	---	7.9	7.6	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	8.1	7.5	---	---	---	---
12	---	---	---	---	---	---	8.1	6.9	7.7	---	---	---
13	---	---	---	---	---	---	8.1	7.1	7.7	---	---	---
14	---	---	---	---	---	---	8.0	7.9	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	7.8	7.3	---	7.1	6.8	---	---	---	---
29	---	---	---	9.0	6.6	7.7	7.3	7.1	7.2	---	---	---
30	---	---	---	7.9	6.6	7.4	7.4	7.2	7.3	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.7	7.0	7.6	8.2	7.0	---	8.2	7.2	7.6
2	---	---	---	8.7	6.9	7.8	---	---	---	8.3	7.2	7.7
3	---	---	---	8.8	7.4	8.1	---	---	---	8.4	7.2	7.7
4	---	---	---	8.7	8.0	---	---	---	---	8.7	7.4	8.0
5	---	---	---	---	---	---	---	---	---	8.4	7.4	7.9
6	---	---	---	---	---	---	---	---	---	8.5	7.4	7.9
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	8.4	7.8	---	---	---	---
16	---	---	---	---	---	---	8.1	7.5	7.7	---	---	---
17	---	---	---	---	---	---	8.3	7.4	7.8	---	---	---
18	---	---	---	8.6	8.0	---	9.0	7.6	8.2	---	---	---
19	---	---	---	8.5	7.4	8.0	8.5	8.0	8.1	---	---	---
20	---	---	---	8.3	6.6	7.1	8.7	7.6	8.0	---	---	---
21	---	---	---	7.7	6.5	7.3	8.8	7.8	8.3	---	---	---
22	---	---	---	7.9	6.7	7.3	8.6	7.6	7.8	---	---	---
23	---	---	---	7.9	7.1	7.5	8.6	8.0	8.2	---	---	---
24	---	---	---	7.9	6.9	7.5	8.4	7.5	7.8	---	---	---
25	---	---	---	7.7	6.5	7.1	8.7	7.7	8.1	---	---	---
26	---	---	---	7.4	6.5	---	8.7	7.8	8.2	---	---	---
27	---	---	---	---	---	---	8.9	7.9	8.4	8.1	7.5	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	9.2	8.7	---	8.1	7.4	---	8.9	8.0	---	---	---	---
30	8.9	7.4	8.3	8.1	6.8	7.5	8.6	7.5	8.0	7.2	7.0	---
31	---	---	---	8.2	6.9	7.6	8.4	7.5	7.9	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	9.2	6.5	7.9									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.0	16.0	16.5				---	---	---	---	---	---
2	17.0	16.0	16.5				---	---	---	---	---	---
3	16.5	15.5	16.0				---	---	---	---	---	---
4	17.5	15.0	16.0				---	---	---	---	---	---
5	16.0	15.5	16.0				---	---	---	---	---	---
6	17.5	15.5	---				---	---	---	0.5	0.5	0.5
7	---	---	---				---	---	---	0.5	0.5	0.5
8	---	---	---				---	---	---	0.5	0.5	0.5
9	---	---	---				---	---	---	0.5	0.5	0.5
10	---	---	---				---	---	---	0.5	0.5	0.5
11	---	---	---				---	---	---	0.5	0.5	0.5
12	---	---	---				---	---	---	0.5	0.5	0.5
13	---	---	---				---	---	---	---	---	---
14	---	---	---				---	---	---	---	---	---
15	---	---	---				---	---	---	---	---	---
15	---	---	---				2.5	2.0	---	---	---	---
17	---	---	---				2.5	2.0	2.5	---	---	---
18	---	---	---				3.0	2.0	2.5	---	---	---
19	---	---	---				---	---	---	---	---	---
20	12.5	11.0	---				---	---	---	---	---	---
21	13.0	11.5	---				2.0	1.0	---	0.5	0.0	0.5
22	---	---	---				2.5	1.0	1.5	0.5	0.5	0.5
23	---	---	---				---	---	---	0.5	0.5	0.5
24	---	---	---				---	---	---	0.5	0.5	0.5
25	---	---	---				---	---	---	0.5	0.5	0.5
26	---	---	---				---	---	---	0.5	0.5	0.5
27	---	---	---				---	---	---	0.5	0.5	0.5
28	---	---	---				---	---	---	0.5	0.0	0.5
29	---	---	---				---	---	---	0.5	0.0	0.5
30	---	---	---				---	---	---	0.5	0.0	0.5
31	---	---	---				---	---	---	0.5	0.0	0.5
MONTH	---	---	---				---	---	---	---	---	---

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.5	---	---	---	---	---	---	12.0	10.5	11.5
2	0.5	0.5	0.5	---	---	---	---	---	---	13.0	11.5	12.0
3	0.5	0.0	0.5	---	---	---	---	---	---	13.5	13.0	13.5
4	0.0	0.0	0.0	---	---	---	---	---	---	13.0	12.5	13.0
5	0.0	0.0	0.0	---	---	---	---	---	---	14.0	13.0	13.5
6	0.0	0.0	0.0	---	---	---	---	---	---	14.5	13.0	14.0
7	0.0	0.0	0.0	---	---	---	---	---	---	14.5	14.0	---
8	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---
9	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---
10	0.5	0.0	0.0	---	---	---	---	---	---	---	---	---
11	0.5	0.0	0.0	---	---	---	9.0	9.0	---	---	---	---
12	0.5	0.0	0.0	---	---	---	10.5	8.5	9.5	---	---	---
13	0.5	0.0	0.0	---	---	---	12.0	10.0	11.0	---	---	---
14	0.5	0.0	0.0	---	---	---	11.5	11.5	---	---	---	---
15	0.5	0.0	0.0	---	---	---	---	---	---	---	---	---
16	1.0	0.0	0.0	---	---	---	---	---	---	---	---	---
17	1.0	0.0	0.5	---	---	---	---	---	---	---	---	---
18	1.5	0.0	0.5	---	---	---	---	---	---	---	---	---
19	2.0	0.5	1.0	---	---	---	---	---	---	---	---	---
20	1.5	0.5	1.5	---	---	---	---	---	---	---	---	---
21	2.0	0.0	1.0	---	---	---	---	---	---	---	---	---
22	2.5	0.0	1.5	---	---	---	---	---	---	---	---	---
23	4.0	0.5	2.5	---	---	---	---	---	---	---	---	---
24	4.0	2.5	3.0	---	---	---	---	---	---	---	---	---
25	7.0	3.0	5.5	---	---	---	---	---	---	---	---	---
26	6.5	5.0	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	5.0	4.5	---	12.0	12.0	---	---	---	---
29	---	---	---	6.5	4.5	6.0	10.0	8.5	9.5	---	---	---
30	---	---	---	8.0	6.0	6.5	11.5	9.5	10.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	7.0	0.0	0.5	---	---	---	---	---	---	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	26.5	24.5	25.5	29.5	23.5	---	28.5	25.0	26.5
2	---	---	---	27.0	24.0	26.5	---	---	---	30.5	25.5	27.5
3	---	---	---	28.5	24.0	26.0	---	---	---	30.0	26.5	28.0
4	---	---	---	28.0	25.0	---	---	---	---	29.0	25.0	27.0
5	---	---	---	---	---	---	---	---	---	27.0	25.0	26.0
6	---	---	---	---	---	---	---	---	---	28.5	24.5	26.0
7	---	---	---	---	---	---	---	---	---	26.5	24.5	25.5
8	---	---	---	---	---	---	---	---	---	25.0	23.0	24.0
9	---	---	---	---	---	---	---	---	---	25.0	22.0	23.5
10	---	---	---	---	---	---	---	---	---	26.5	23.0	24.5
11	---	---	---	---	---	---	---	---	---	24.5	22.0	23.0
12	---	---	---	---	---	---	---	---	---	24.0	19.5	21.5
13	---	---	---	---	---	---	---	---	---	24.0	20.5	22.0
14	---	---	---	---	---	---	---	---	---	23.0	21.0	21.5
15	---	---	---	---	---	---	30.0	23.0	---	22.5	19.0	20.5
16	---	---	---	---	---	---	24.0	20.5	22.0	20.0	19.5	19.5
17	---	---	---	---	---	---	26.0	24.0	25.0	---	---	---
18	---	---	---	34.5	27.5	---	27.0	20.5	24.5	---	---	---
19	---	---	---	34.0	27.0	30.0	26.5	19.5	22.5	---	---	---
20	---	---	---	34.5	27.5	31.0	27.0	20.0	23.5	---	---	---
21	---	---	---	37.0	28.0	32.0	27.0	18.0	23.0	---	---	---
22	---	---	---	34.5	27.5	30.5	26.0	19.0	23.0	---	---	---
23	---	---	---	31.5	21.0	26.0	26.0	22.5	24.5	---	---	---
24	---	---	---	31.0	21.5	25.5	25.5	23.0	24.0	---	---	---
25	---	---	---	23.0	20.5	22.0	26.0	21.0	23.5	---	---	---
26	---	---	---	26.5	23.0	---	26.5	21.5	24.0	---	---	---
27	---	---	---	---	---	---	26.0	22.5	24.0	17.0	16.0	---
28	---	---	---	---	---	---	---	---	---	17.0	16.0	16.5
29	27.5	25.0	---	34.5	24.5	---	29.5	26.0	---	17.0	16.0	---
30	27.0	24.0	25.5	31.5	22.5	26.5	30.0	25.5	27.5	18.0	17.0	---
31	---	---	---	33.5	24.0	29.0	27.5	26.0	26.5	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	37.0	0.0	12.5									

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.8	9.0	9.5	12.7	12.0	12.4	---	---	---	---	---	---
2	10.8	9.0	10.0	13.1	12.2	12.6	---	---	---	---	---	---
3	10.0	9.4	9.6	14.4	12.2	13.4	---	---	---	---	---	---
4	10.3	9.0	9.6	14.2	12.9	13.7	---	---	---	---	---	---
5	10.2	9.2	9.8	---	---	---	---	---	---	---	---	---
6	9.8	9.2	---	---	---	---	---	---	---	16.1	15.7	15.9
7	---	---	---	---	---	---	---	---	---	15.9	15.5	15.7
8	---	---	---	---	---	---	---	---	---	16.1	15.4	15.8
9	---	---	---	---	---	---	---	---	---	15.9	15.5	15.8
10	---	---	---	---	---	---	---	---	---	15.6	15.0	15.2
11	---	---	---	---	---	---	---	---	---	15.8	15.0	15.4
12	---	---	---	---	---	---	---	---	---	15.9	15.5	15.7
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	13.1	12.7	---	15.4	13.0	---	---	---	---
17	---	---	---	12.9	12.2	12.6	15.2	12.4	14.4	---	---	---
18	---	---	---	12.1	10.4	---	14.0	12.8	13.4	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	12.6	10.2	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	12.9	12.7	---
22	---	---	---	---	---	---	---	---	---	13.1	12.8	12.9
23	---	---	---	---	---	---	---	---	---	13.3	13.0	13.1
24	---	---	---	---	---	---	---	---	---	13.2	13.0	13.1
25	---	---	---	---	---	---	---	---	---	13.1	12.8	13.0
26	---	---	---	---	---	---	---	---	---	13.2	12.8	13.0
27	---	---	---	---	---	---	---	---	---	13.7	13.0	13.2
28	---	---	---	---	---	---	---	---	---	13.5	13.1	13.3
29	12.6	12.1	12.4	---	---	---	---	---	---	14.6	13.4	14.0
30	12.9	12.4	12.7	---	---	---	---	---	---	14.9	13.9	14.4
31	12.9	11.9	12.4	---	---	---	---	---	---	14.7	14.3	14.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.6	14.1	14.8	---	---	---	---	---	---			
2	15.8	14.6	15.1	---	---	---	---	---	---			
3	14.8	13.9	14.5	---	---	---	---	---	---			
4	14.2	13.3	13.7	---	---	---	---	---	---			
5	13.4	12.9	13.1	---	---	---	---	---	---			
6	14.2	13.0	13.6	---	---	---	---	---	---			
7	15.1	13.6	14.3	---	---	---	---	---	---			
8	16.2	14.3	15.1	---	---	---	---	---	---			
9	16.3	15.0	15.6	---	---	---	---	---	---			
10	16.0	14.7	15.2	---	---	---	---	---	---			
11	16.0	14.5	15.1	---	---	---	12.4	11.7	---			
12	15.6	14.0	14.7	---	---	---	12.1	9.8	10.7			
13	14.8	13.4	14.0	---	---	---	10.7	8.6	9.7			
14	15.2	13.0	13.8	---	---	---	10.6	8.8	---			
15	14.9	12.8	13.6	---	---	---	---	---	---			
16	15.7	12.9	14.2	---	---	---	---	---	---			
17	15.9	13.7	14.8	---	---	---	---	---	---			
18	16.3	13.6	15.0	---	---	---	---	---	---			
19	16.1	13.8	15.1	---	---	---	---	---	---			
20	15.3	13.6	14.4	---	---	---	---	---	---			
21	16.1	13.5	14.9	---	---	---	---	---	---			
22	16.1	14.0	---	---	---	---	---	---	---			
23	---	---	---	---	---	---	---	---	---			
24	---	---	---	---	---	---	---	---	---			
25	---	---	---	---	---	---	---	---	---			
26	---	---	---	---	---	---	---	---	---			
27	---	---	---	---	---	---	---	---	---			
28	---	---	---	11.8	11.1	---	11.2	9.0	---			
29	---	---	---	11.4	10.7	11.1	---	---	---			
30	---	---	---	10.8	10.2	10.5	---	---	---			
31	---	---	---	---	---	---	---	---	---			
MONTH	16.3	12.8	---	---	---	---	---	---	---			

01463500 DELAWARE RIVER AT TRENTON, NJ (MORRISVILLE, PA)--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	12.8	8.2	9.2	8.9	5.8	---	10.4	6.7	7.9
2	---	---	---	13.8	8.1	11.4	---	---	---	10.3	6.6	7.9
3	---	---	---	13.3	7.8	10.6	---	---	---	9.5	5.6	7.1
4	---	---	---	11.8	8.1	---	---	---	---	10.5	5.8	7.4
5	---	---	---	---	---	---	---	---	---	9.8	6.0	7.3
6	---	---	---	---	---	---	---	---	---	10.0	5.7	7.5
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	10.9	7.8	---	---	---	---
16	---	---	---	---	---	---	9.0	6.7	7.9	---	---	---
17	---	---	---	---	---	---	10.1	7.5	8.4	---	---	---
18	---	---	---	14.1	10.1	---	11.9	6.7	8.9	---	---	---
19	---	---	---	12.8	9.1	10.5	10.8	7.1	8.8	---	---	---
20	---	---	---	13.4	8.7	10.8	11.8	7.0	8.6	---	---	---
21	---	---	---	12.0	8.2	9.9	11.6	7.4	8.9	---	---	---
22	---	---	---	12.9	7.8	10.2	9.9	8.0	8.8	---	---	---
23	---	---	---	13.4	8.0	10.6	10.6	8.3	9.1	---	---	---
24	---	---	---	13.3	8.0	10.7	9.8	7.1	8.1	---	---	---
25	---	---	---	12.4	8.6	9.9	11.7	7.3	8.8	---	---	---
26	---	---	---	12.7	8.2	---	11.1	8.7	9.4	---	---	---
27	---	---	---	---	---	---	11.3	8.5	9.3	10.3	7.6	---
28	---	---	---	---	---	---	---	---	---	12.2	9.8	10.8
29	13.7	9.5	---	12.2	7.2	---	---	---	---	11.2	9.9	---
30	13.8	7.3	10.2	11.4	6.0	8.3	---	---	---	9.7	7.4	---
31	---	---	---	12.2	6.0	8.8	9.9	7.0	8.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	16.3	5.6	11.9									

01463568 ASSUNPINK CREEK AT CARSONS MILLS, NJ

LOCATION.--Lat 40°13'05", long 74°33'08", Monmouth County, Hydrologic Unit 02040105, at bridge at Carsons Mills, 1.3 mi (2.0 km) northeast of Pages Corner, and 0.1 mi (0.2 km) upstream from New Sharon Branch.

DRAINAGE AREA.--12.5 mi^2 (32.4 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 08...	1425	122	7.4	6.0	2	10.6	--	>20	240	37
FEB 23...	1445	144	6.0	2.0	4	12.4	1.0	<20	33	41
MAR 16...	1445	126	6.2	8.0	5	9.8	<.5	20	2	37
APR 20...	1430	125	6.3	12.0	3	--	2.0	50	17	46
MAY 23...	0910	147	6.8	18.5	3	10.3	--	50	79	51
JUN 21...	1430	149	6.6	18.0	5	9.1	2.0	50	920	51
JUL 11...	1445	149	7.2	27.0	4	9.4	<.5	170	79	48
AUG 01...	1420	166	--	19.0	1	8.1	--	20	14	58
SEP 29...	1430	126	--	15.0	2	10.9	--	70	350	39

DATE	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 08...	7.8	4.2	4.3	2.9	--	25	11	--	60	10
FEB 23...	8.4	4.9	4.9	2.8	--	28	11	--	78	1
MAR 16...	7.9	4.3	4.8	2.5	--	27	9.4	--	65	17
APR 20...	9.8	5.2	3.8	2.8	--	27	9.2	--	94	6
MAY 23...	11	5.8	4.5	2.4	--	27	12	--	98	2
JUN 21...	11	5.8	4.5	2.3	--	26	12	--	87	8
JUL 11...	10	5.6	4.4	2.0	--	27	12	--	104	5
AUG 01...	12	6.8	5.0	2.1	--	28	15	--	101	5
SEP 29...	8.7	4.3	4.1	3.0	.0	24	9.0	6.7	74	5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 08...	--	--	--	--	1.4	--	.01	--	5.1
FEB 23...	--	--	--	--	1.5	--	--	--	4.2
MAR 16...	--	--	--	--	1.4	--	.07	--	8.2
APR 20...	--	--	--	--	1.4	--	.03	--	5.0
MAY 23...	--	--	--	--	1.4	--	.07	--	6.5
JUN 21...	--	--	--	--	1.3	--	.06	--	5.4
JUL 11...	1.1	.00	.05	.35	.40	1.5	.04	.01	6.5
AUG 01...	1.7	.01	.01	.30	.31	2.0	.01	.01	4.9
SEP 29...	.46	.00	.04	.27	.31	.77	.10	.01	10

01463568 ASSUNPINK CREEK AT CARSONS MILLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
SEP 29...	1430	50	2	0	0	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
SEP 29...	640	10	110	<.5	1	0	40	2

01463620 ASSUNPINK CREEK NEAR CLARKSVILLE, NJ

LOCATION.--Lat 40°16'11", long 74°40'20", Mercer County, Hydrologic Unit 02040105, on left bank 200 ft (61 m) upstream from bridge on Quaker Bridge Road, 1.9 mi (3.1 km) south of Clarksville, 2.0 mi (3.2 km) upstream from Shipetaukin Creek, and 7.6 mi (12.2 km) upstream of mouth.

DRAINAGE AREA.--34.3 mi² (88.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1972 to current year. Occasional low-flow measurements water years 1963-67.

REVISED DISCHARGE RECORDS.--WRD-NJ 1974: 1973(M). WDR-NJ-75-1: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 49.28 ft (15.021 m) NGVD.

REMARKS.--Discharge records poor. Some regulation from dams and ponds upstream.

AVERAGE DISCHARGE.--5 years, 53.2 ft³/s (1.507 m³/s), 21.06 in/yr (535 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 145 ft³/s (4.11 m³/s) Feb. 27, Mar. 23, gage height, 5.41 ft (1.649 m), no peak above base of 200 ft³/s (5.66 m³/s); minimum daily, 7.0 ft³/s (0.20 m³/s) July 31.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) July 21, 1975, gage height, 9.36 ft (2.853 m), from crest-stage gage; minimum daily, 7.0 ft³/s (0.20 m³/s) July 31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached a stage of 10.9 ft (3.32 m), discharge, 1,500 ft³/s (42.5 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	41	16	16	16	84	39	36	8.4	15	9.6	21
2	15	42	16	15	15	69	38	32	10	12	16	18
3	14	40	15	15	15	60	50	29	11	11	20	17
4	14	38	14	14	15	54	55	28	13	10	26	15
5	14	36	14	15	15	59	80	25	12	9.4	26	14
6	14	33	14	16	32	59	100	22	17	10	22	15
7	13	32	18	15	15	54	98	27	14	11	18	19
8	13	29	36	14	15	49	87	26	12	13	15	16
9	17	29	41	14	15	45	76	24	20	10	14	16
10	24	27	41	19	15	44	67	23	52	9.0	12	15
11	26	26	38	32	18	44	55	22	30	10	12	15
12	24	25	35	35	32	44	47	21	17	20	11	14
13	20	24	30	32	45	45	40	19	15	35	12	13
14	18	24	21	30	55	55	37	18	13	17	17	18
15	17	22	20	30	57	59	36	16	15	14	23	13
16	15	22	19	29	55	54	32	15	17	12	16	13
17	15	22	24	26	48	49	31	14	15	10	21	14
18	13	21	21	24	42	47	30	14	13	9.2	16	19
19	13	20	20	22	37	52	31	16	13	8.6	18	16
20	15	19	18	22	34	54	30	16	12	8.0	16	22
21	33	18	20	22	32	51	30	14	14	7.8	16	33
22	42	18	25	21	30	66	29	13	17	7.4	20	20
23	43	16	21	19	29	132	30	13	14	7.3	50	20
24	42	15	20	19	36	121	29	13	12	7.2	45	27
25	40	15	19	19	90	101	30	12	11	7.2	40	41
26	39	15	19	19	109	86	33	11	10	8.4	27	38
27	39	14	18	18	127	73	36	11	11	9.8	23	36
28	38	14	18	18	101	59	37	10	15	8.4	19	33
29	36	15	18	24	---	51	38	9.6	21	7.8	18	31
30	35	15	18	18	---	47	38	9.0	19	7.2	17	30
31	36	---	17	17	---	42	---	8.8	---	7.0	17	---
TOTAL	750	727	684	649	1145	1909	1389	567.4	473.4	339.7	632.6	632
MEAN	24.2	24.2	22.1	20.9	40.9	61.6	46.3	18.3	15.8	11.0	20.4	21.1
MAX	43	42	41	35	127	132	100	36	52	35	50	41
MIN	13	14	14	14	15	42	29	8.8	8.4	7.0	9.6	13
CFSM	.71	.71	.64	.61	1.19	1.80	1.35	.53	.46	.32	.60	.62
IN.	.81	.79	.74	.70	1.24	2.07	1.51	.62	.51	.37	.69	.69

CAL YR 1976 TOTAL 14386.0 MEAN 39.3 MAX 282 MIN 8.0 CFSM 1.15 IN 15.60
WTR YR 1977 TOTAL 9898.1 MEAN 27.1 MAX 132 MIN 7.0 CFSM .79 IN 10.73

01463625 ASSUNPINK CREEK AT BAKERSVILLE, NJ

LOCATION.--Lat 40°16'06", long 74°42'07", Mercer County, Hydrologic Unit 02040105, at bridge on Basin Road, 1.4 mi (2.3 km) southeast of Franklin Corner, 0.5 mi (0.8 km) southeast of Bakersville, and midway between U.S. Route 1 and Penn Central Railroad tracks.

DRAINAGE AREA.--38.6 mi² (100.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1977.
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1100	148	6.7	12.0	8	9.2	1.5	8210	240	--	140	42
NOV 23...	1140	153	6.6	2.0	5	12.6	1.3	130	8	872	<20	44
FEB 09...	1150	180	6.6	.0	4	7.0	.6	56	2	810	<2	48
MAR 24...	0930	117	6.3	5.0	90	11.5	2.0	420	920	1600	>2400	35
MAY 24...	0915	141	7.4	21.0	4	4.2	1.5	150	110	430	130	43
JUN 23...	0850	152	7.2	19.0	1	7.4	1.1	400	240	660	490	46
JUL 12...	1010	64	7.1	23.0	4	8.0	--	--	8	--	>2400	19
AUG 17...	0845	137	6.9	24.0	2	6.2	1.9	--	110	--	79	45
SEP 22...	0945	135	6.9	19.0	9	6.7	1.4	--	<20	--	350	39

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 12...	29	8.8	4.8	5.1	2.7	16	0	13	5.1	18	13	85
NOV 23...	--	9.2	5.2	5.2	2.9	--	0	--	--	24	13	83
FEB 09...	38	10	5.7	8.4	2.8	12	0	10	4.8	26	19	97
MAR 24...	29	7.9	3.6	5.2	2.7	7	0	6	5.6	22	9.9	63
MAY 24...	31	8.9	5.0	5.8	2.6	15	0	12	1.0	20	13	98
JUN 23...	28	10	5.1	5.8	2.4	22	0	18	2.2	20	13	82
JUL 12...	6	4.9	1.6	2.3	1.1	16	0	13	2.0	6.3	3.5	42
AUG 17...	25	10	4.9	5.2	2.4	24	0	20	4.8	16	12	87
SEP 22...	23	8.2	4.6	5.3	3.2	20	0	16	4.0	19	11	65

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 12...	14	--	--	.11	.22	.33	--	1.9	.06	--	4.3	--
NOV 23...	2	--	--	--	--	1.5	--	--	.03	--	2.2	--
FEB 09...	8	--	--	--	--	1.4	--	--	.03	--	7.0	--
MAR 24...	83	--	--	--	--	2.2	--	--	.28	--	--	--
MAY 24...	6	--	--	--	--	1.4	--	--	.02	--	4.2	--
JUN 23...	11	--	--	--	--	1.3	--	--	.02	--	7.1	--
JUL 12...	89	.48	.01	.13	.60	.73	--	1.2	.27	.04	8.3	--
AUG 17...	6	.44	.01	.10	.53	.63	--	1.1	.05	.01	11	--
SEP 22...	30	.67	.01	.16	.53	.69	2800	1.4	.06	.02	8.4	33

01463625 ASSUNPINK CREEK AT BAKERSVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)
SEP 22...	0945	8	<10	<10	<10	<10	7900	<10	40	.0	<10	30

DATE	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
SEP 22...	4	.0	4	9.6	7.3	5.2	.0	.0	.0	.0	.0	0

01463670 SHIPETAUKIN CREEK AT BAKERSVILLE, NJ

LOCATION.--Lat 40°16'26", long 74°42'10", Mercer County, Hydrologic Unit 02040105, at bridge on State Route 546, 0.3 mi (0.5 km) east of Bakersville, 0.4 mi (0.6 km) upstream from mouth, and 2.2 mi (3.5 km) southeast of Lawrenceville.

DRAINAGE AREA.--8.96 mi² (23.21 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1963, 1965, 1967, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT 12...	1015	257	6.9	9.0	4	9.0	1.5	1700	140	--
NOV 23...	1100	242	7.1	2.5	5	11.9	1.9	B800	5400	580
FEB 16...	0830	207	6.9	.0	7	10.6	2.0	B630	<20	--
MAR 24...	0845	176	7.1	3.5	15	12.0	1.1	B140	130	310
MAY 24...	0805	229	7.7	17.5	2	6.2	2.3	B5600	5400	B11000
JUN 23...	0810	234	7.5	16.0	1	6.7	8.2	3300	3400	2700
JUL 12...	0915	139	7.1	23.0	2	7.9	--	--	200	--
AUG 17...	0930	225	7.1	21.5	2	6.2	.9	--	1700	--
SEP 22...	0830	247	7.5	16.5	4	6.5	4.2	--	3300	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT 12...	200	78	37	19	7.4	10	3.1	50	0	41
NOV 23...	170	82	33	19	8.5	11	2.3	60	0	49
FEB 16...	500	64	36	15	6.4	13	2.3	34	0	28
MAR 24...	350	54	35	13	5.3	9.1	2.2	23	0	19
MAY 24...	>2400	90	42	22	8.5	12	2.4	59	0	48
JUN 23...	2400	87	31	22	7.9	11	2.4	68	0	56
JUL 12...	500	40	22	8.5	4.5	5.5	2.3	22	0	18
AUG 17...	330	80	30	20	7.3	11	2.8	61	0	50
SEP 22...	1600	78	28	19	7.3	12	3.7	61	0	50

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 12...	10	--	36	15	--	142	10	--	--
NOV 23...	7.6	--	31	16	--	139	7	--	--
FEB 16...	6.8	--	33	20	--	130	3	--	--
MAR 24...	2.9	--	29	13	--	109	9	--	--
MAY 24...	1.9	.0	24	15	10	123	10	--	--
JUN 23...	3.4	--	24	16	--	126	13	--	--
JUL 12...	2.8	--	17	15	--	80	18	.49	.00
AUG 17...	7.8	--	23	15	--	137	1	1.6	.02
SEP 22...	3.1	--	26	17	--	125	8	2.1	.02

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
OCT 12...	--	--	1.0	--	--	.07	--	5.9	--
NOV 23...	--	--	1.1	--	--	.06	--	2.2	--
FEB 16...	--	--	2.0	--	--	.06	--	7.0	--
MAR 24...	--	--	1.7	--	--	.08	--	--	--
MAY 24...	--	--	1.4	--	--	.09	--	5.9	--
JUN 23...	--	--	1.1	--	--	.04	--	[illegible].5	--
JUL 12...	.13	.30	.43	--	.92	.05	.00	7.1	--
AUG 17...	.19	.36	.55	--	2.2	.11	.07	[illegible]	--
SEP 22...	.12	.31	.43	7600	2.5	.13	.08	[illegible].8	36

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 24...	0805	0	3	--	40	0	--	--	0	0
SEP 22...	0830	--	--	17	--	--	<10	<10	--	--

DATE	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 24...	--	3	--	120	--	5	--	180	--	.0
SEP 22...	<10	--	10	--	8000	--	13	--	80	--

DATE	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)
MAY 24...	--	4	--	0	40	--	0	--	--	--
SEP 22...	.0	--	<10	--	--	40	--	16	.0	0

DATE	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
MAY 24...	--	--	--	--	--	--	--	--	--
SEP 22...	27	13	4.2	.2	.0	.0	.0	.0	0

01463810 SHABAKUNK CREEK NEAR LAWRENCEVILLE, NJ

LOCATION.--Lat 40°15'19", long 74°44'17", Mercer County, Hydrologic Unit 02040105, at bridge on Princeton Pike, 2.2 mi (3.5 km) southwest of Bakersville, and 2.0 mi (3.3 km) southwest of Franklin Corner.

DRAINAGE AREA.--11.7 mi² (30.3 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./ 100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT 12...	0915	333	7.2	9.0	6	9.4	1.0	1800	790	--	490	120
NOV 23...	1025	335	7.2	.0	5	12.4	2.9	310	140	130	<20	120
FEB 16...	0930	350	7.0	.0	6	12.2	2.3	340	2	--	540	92
MAR 24...	1035	333	7.4	11.5	10	5.0	1.2	420	920	790	540	100
MAY 24...	1015	319	7.8	21.0	4	6.9	2.1	940	790	670	110	110
JUN 23...	0945	316	7.7	19.0	1	7.5	1.6	1100	3500	930	330	110
JUL 12...	1110	63	7.1	23.5	15	7.0	--	--	<20	--	>24000	16
AUG 17...	1015	385	7.3	23.0	2	7.3	3.0	--	2400	--	80	150
SEP 22...	1120	359	7.5	17.0	3	7.6	1.5	--	1600	--	350	130

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT 12...	48	33	8.0	13	3.7	88	0	72	8.9	.4	48	16
NOV 23...	35	33	10	15	3.2	104	0	85	10	--	49	19
FEB 16...	50	24	7.8	26	2.9	51	0	42	8.2	--	43	44
MAR 24...	56	28	8.3	23	3.3	54	0	44	3.4	--	50	33
MAY 24...	30	30	9.1	17	3.3	98	0	80	2.5	.0	36	22
JUN 23...	32	29	8.3	16	3.4	95	0	78	3.0	--	34	20
JUL 12...	4	5.1	.9	2.6	1.9	15	0	12	1.9	--	6.7	3.7
AUG 17...	48	42	10	18	4.8	124	0	102	9.9	--	51	23
SEP 22...	52	38	8.5	17	4.7	95	0	78	4.8	--	48	21

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 12...	13	186	14	--	--	.15	.45	.60	1.6	.08	--	5.1
NOV 23...	--	201	2	--	--	--	--	.70	--	.04	--	3.6
FEB 16...	--	205	3	--	--	--	--	1.5	--	.05	--	7.2
MAR 24...	--	207	14	--	--	--	--	1.7	--	.05	--	--
MAY 24...	7.7	175	14	--	--	--	--	1.4	--	.04	--	5.3
JUN 23...	--	192	0	--	--	--	--	1.4	--	.02	--	7.0
JUL 12...	--	44	273	.35	.02	.13	.76	.89	1.3	.29	.06	9.0
AUG 17...	--	246	4	.69	.03	.05	.46	.51	1.2	.05	.00	7.8
SEP 22...	--	159	9	.82	.01	.05	.39	.44	1.3	.06	.01	8.7

01463810 SHABAKUNK CREEK NEAR LAWRENCEVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT										
12...	0915	50	50	0	2	130	0	2	0	10
MAY										
24...	1015	--	--	0	1	120	0	0	0	2

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
OCT									
12...	740	70	14	150	<.5	4	0	60	--
MAY									
24...	--	20	11	230	.0	7	0	50	1

01464000 ASSUNPINK CREEK AT TRENTON, NJ

LOCATION.--Lat 40°13'27", long 74°44'58", Mercer County, Hydrologic Unit 02040105, on left bank at Chambers Street Bridge in Trenton and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--89.4 mi^2 (231.5 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: August 1923 to current year.
CHEMICAL ANALYSES: Water years 1972 to current year.
SEDIMENT ANALYSES: Water years 1971-75, 1977.

GAGE.--Water-stage recorder. Concrete control since July 10, 1932. Datum of gage is 24.76 ft (7.547 m) NGVD (levels from New Jersey Geological Survey bench mark).

REMARKS.--Discharge records good. Records include water diverted from outside the basin since February 1954 for municipal supply which returns to Assunpink Creek through Ewing-Lawrence Sewerage Authority Treatment Plant, 2.4 mi (3.9 km) above station (records given herein). In addition there is an average inflow of about 2.0 ft^3/s (0.057 m^3/ from industrial use of water that originates outside the basin. Some diversion for irrigation in headwater area during summer months.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--54 years, 125 ft^3/s (3.540 m^3/s), unadjusted.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 25	0045	1250	35.4	6.86	2.091	July 12	1330	1060	30.0	6.32	1.926
Mar. 22	2000	*1860	52.7	8.41	2.563	Aug. 1	2045	921	26.1	5.92	1.804
Apr. 5	0615	1090	30.9	6.40	1.951						

Minimum discharge, 22 ft^3/s (0.62 m^3/s) July 25, gage height, 2.43 ft (0.741 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,450 ft^3/s (154 m^3/s) July 21, 1975, gage height, 14.61 ft (4.453 m), from high-water mark in gage house; minimum, 1.0 ft^3/s (0.028 m^3/s) Aug. 21, Oct. 22, 1931, gage height, 0.25 ft (0.076 m); minimum daily, 4.0 ft^3/s (0.11 m^3/s) July 21, Aug. 8, Sept. 2, 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	107	48	41	42	193	104	89	41	42	242	79
2	49	89	48	40	42	156	237	86	43	37	142	60
3	58	83	45	44	43	132	271	82	40	31	273	52
4	54	78	43	44	43	200	195	79	34	30	127	45
5	44	74	41	46	45	263	775	136	31	33	71	43
6	43	72	42	46	41	164	405	90	61	44	77	60
7	40	67	175	46	43	142	279	84	58	52	66	66
8	39	66	134	41	42	123	225	73	41	39	53	56
9	378	68	94	39	43	109	181	86	318	34	48	56
10	118	64	82	202	54	104	158	78	118	30	48	53
11	70	61	76	113	77	100	140	71	67	31	49	47
12	59	58	70	94	116	95	127	67	55	365	43	48
13	57	58	67	81	154	271	118	64	54	111	82	47
14	48	54	55	72	154	368	107	60	52	62	122	46
15	45	56	64	68	138	190	98	53	52	50	71	43
16	43	54	61	64	116	150	92	55	47	44	60	43
17	38	53	60	61	95	127	86	54	45	38	71	64
18	39	52	55	58	83	212	86	60	42	39	64	47
19	39	51	51	54	76	181	86	71	39	39	52	62
20	175	48	56	53	73	146	83	56	70	39	47	146
21	248	45	78	52	71	140	82	50	68	37	45	56
22	113	46	53	49	67	824	79	46	45	32	186	49
23	86	46	56	45	70	666	78	46	41	28	74	49
24	78	45	51	46	245	377	100	46	39	26	82	276
25	82	43	46	47	691	279	132	46	38	55	89	273
26	111	41	49	48	313	220	174	45	35	48	78	144
27	81	43	51	48	271	178	166	43	36	35	72	129
28	74	68	48	48	258	156	122	40	78	32	67	131
29	72	55	48	44	---	140	138	35	127	30	65	102
30	67	53	46	44	---	129	100	32	48	28	62	90
31	182	---	44	43	---	120	---	37	---	27	62	---
TOTAL	2725	1796	1937	1821	3506	6655	5024	1960	1863	1568	2690	2462
MEAN	87.9	59.9	62.5	58.7	125	215	167	63.2	62.1	50.6	86.8	82.1
MAX	378	107	175	202	691	824	775	136	318	365	273	276
MIN	38	41	41	39	41	95	78	32	31	26	43	43
(†)	10.9	10.3	9.76	9.99	11.4	15.9	16.3	12.0	11.1	10.3	11.5	11.5

CAL YR 1976 TOTAL 41629 MEAN 114 MAX 960 MIN 26 † 12.1
WTR YR 1977 TOTAL 34007 MEAN 93.2 MAX 824 MIN 26 † 11.7

† Inflow from outside basin, 2.4 mi (3.9 m) upstream of station through plant of Ewing-Lawrence Sewerage Authority, in cubic feet per second.

01464000 ASSUNPINK CREEK AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
OCT 12...	1230	59	332	6.9	15.5	11	7.8	7.4	84000	1300
NOV 23...	0900	37	423	7.7	7.0	7	10.8	6.4	8200	<20
FEB 09...	0930	39	472	7.2	6.0	6	10.9	13	8130	79
MAR 24...	1215	370	167	7.1	5.0	65	11.6	1.4	82	<2
MAY 26...	1115	47	433	7.4	22.5	2	5.8	7.6	3800	1300
JUN 23...	1135	43	447	7.4	22.5	7	5.9	7.5	15000	17000
JUL 12...	1230	932	217	7.4	24.0	2	4.8	--	--	3500
AUG 17...	1100	59	375	7.0	25.0	2	5.6	15	--	>24000
SEP 22...	1445	53	393	7.1	21.5	9	5.8	7.8	--	>2400

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT 12...	--	330	70	24	18	6.2	25	4.7	56	0
NOV 23...	83	<20	84	15	21	7.6	32	5.0	84	0
FEB 09...	68	130	84	24	20	8.2	44	4.7	73	0
MAR 24...	820	<2	52	36	13	4.8	11	2.9	20	0
MAY 26...	3800	200	97	51	25	8.3	35	4.8	56	0
JUN 23...	3400	330	80	2	21	6.8	33	4.3	95	0
JUL 12...	--	16000	59	23	17	4.0	13	2.8	44	0
AUG 17...	--	490	81	23	21	7.0	33	5.3	71	0
SEP 22...	--	1600	73	17	19	6.2	36	5.2	68	0

DATE	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 12...	46	11	44	29	177	18	--	--	--	--
NOV 23...	69	2.7	47	51	212	6	--	--	--	--
FEB 09...	60	7.4	58	56	234	6	11	1.2	--	--
MAR 24...	16	2.5	30	18	109	55	--	--	--	--
MAY 26...	46	3.6	53	46	248	26	--	--	--	--
JUN 23...	78	6.1	53	39	228	9	--	--	--	--
JUL 12...	36	2.8	21	18	126	260	--	--	.37	.02
AUG 17...	58	11	52	35	209	5	--	--	1.1	.15
SEP 22...	56	8.6	56	33	196	17	--	--	.98	.12

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
OCT									
12...	--	--	3.6	--	--	1.3	--	7.9	--
NOV									
23...	--	--	7.3	--	--	.98	--	9.0	--
FEB									
09...	--	--	8.1	--	--	.65	--	5.3	--
MAR									
24...	--	--	2.5	--	--	2.0	--	--	--
MAY									
26...	--	--	1.4	--	--	.52	--	7.2	--
JUN									
23...	--	--	2.8	--	--	.82	--	4.7	--
JUL									
12...	.84	1.6	2.4	--	2.8	1.4	.08	11	--
AUG									
17...	2.4	1.6	4.0	--	5.2	1.5	1.2	7.9	--
SEP									
22...	3.6	1.0	4.6	14000	5.7	1.6	1.1	8.7	89

DATE	TIME	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)
SEP												
22...	1445	12	<10	40	<10	150	8000	510	130	.6	34	370

DATE	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
SEP												
22...	690	.0	380	100	39	27	29	1.0	.0	.0	.0	0

01464020 ASSUNPINK CREEK AT PEACE STREET AT TRENTON, NJ

LOCATION.--Lat 40°13'02", long 74°46'08", Mercer County, Hydrologic Unit 02040105, at bridge on Peace Street, 0.3 mi (0.5 km) northwest of Trent House, and 0.7 mi (1.1 km) southeast of the Trenton Filtration Plant.

DRAINAGE AREA.--91.4 mi² (236.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM ,TUM-MF (COL./ 100 ML)	FECAL COLIFORM (EC BROTH: (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT												
12...	1415	333	7.1	16.0	9	7.7	8.4	875000	160000	--	7900	71
NOV												
23...	0945	379	7.7	7.0	7	10.0	6.0	81000	490	440	200	85
FEB												
09...	1020	482	7.3	4.0	6	10.0	11	1500	220	470	350	87
MAR												
30...	1445	270	7.2	15.5	15	9.1	3.7	850	<20	--	20	75
MAY												
26...	1020	417	7.5	22.5	2	6.3	7.4	870000	7900	12000	2300	96
JUN												
23...	1040	447	7.6	22.5	5	6.6	5.8	29000	160000	19000	2300	90
JUL												
12...	1400	143	7.4	24.5	4	5.4	--	--	16000	--	35000	41
AUG												
17...	1145	375	7.1	25.0	2	6.0	17	--	>240000	--	2300	86
SEP												
21...	1345	349	7.3	21.5	10	6.0	8.2	--	13000	--	>2400	73

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT												
12...	25	18	6.4	25	4.8	56	0	46	7.1	--	45	29
NOV												
23...	18	21	8.0	25	5.0	82	0	67	2.6	--	45	41
FEB												
09...	29	21	8.3	44	4.7	71	0	58	5.7	--	57	57
MAR												
30...	47	18	7.2	18	3.2	34	0	28	3.4	--	40	27
MAY												
26...	38	24	8.8	32	4.6	71	0	58	3.6	.0	51	45
JUN												
23...	30	23	7.9	35	5.0	73	0	60	2.9	--	56	43
JUL												
12...	17	8.6	4.7	8.6	2.3	29	0	24	1.8	--	14	12
AUG												
17...	28	23	7.0	35	5.2	71	0	58	9.0	--	50	39
SEP												
21...	19	19	6.2	30	4.7	66	0	54	5.3	--	43	33

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT												
12...	--	181	18	--	--	--	--	3.6	--	1.6	--	8.3
NOV												
23...	--	199	2	--	--	--	--	6.4	--	.82	--	4.4
FEB												
09...	--	235	11	--	--	--	--	7.6	--	.65	--	7.2
MAR												
30...	--	153	20	--	--	--	--	2.9	--	.24	--	--
MAY												
26...	7.4	220	17	--	--	--	--	1.5	--	.36	--	6.0
JUN												
23...	--	229	3	--	--	--	--	1.5	--	.49	--	4.3
JUL												
12...	--	77	287	.47	.03	.49	1.2	1.7	2.2	.86	.09	6.4
AUG												
17...	--	218	0	1.3	.17	2.2	1.5	3.7	5.2	1.3	.92	5.3
SEP												
21...	--	187	1	1.2	.14	2.7	1.0	3.7	5.0	1.2	.82	8.5

01464020 ASSUNPINK CREEK AT PEACE STREET AT TRENTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 26...	1020	50	1	150	0	0	0	16

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 26...	20	20	240	.0	40	0	60	3

01464040 DELAWARE RIVER AT MARINE TERMINAL, TRENTON, NJ

LOCATION.--Lat 40°11'21", long 74°45'22", Mercer County, Hydrologic Unit 02040201, on left bank at downstream end of wharf at Marine Terminal, Trenton, 1.6 mi (2.6 km) downstream from toll bridge on U.S. Highway 1, 2.0 mi (3.2 km) downstream from Assunpink Creek, and at river mile 131.80 (212.07 km).

DRAINAGE AREA.--6,870 mi² (17,790 km²).

PERIOD OF DAILY RECORD.--
TIDE ELEVATION: May 1964 to current year. March 1921 to June 1946 (at municipal pier, 1.5 mi or 2.4 km upstream), August 1951 to June 1954, September 1957 to April 1964, in files of Philadelphia District Corps of Engineers.
SPECIFIC CONDUCTANCE: October 1972 to June 1976.
WATER TEMPERATURES: October 1972 to June 1976.

GAGE.--Water-stage recorder. Datum of gage is -12.90 ft (-3.932 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records of tide elevations fair. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy.

EXTREMES FOR CURRENT YEAR.--
TIDE ELEVATIONS: Maximum, 8.50 ft (2.591 m) Mar. 15; minimum, -5.10 ft (-1.554 m) Dec. 3.

EXTREMES FOR PERIOD OF DAILY RECORD.--
TIDE ELEVATIONS: Maximum, 9.28 ft (2.829 m) June 30, 1973; minimum, -7.00 ft (-2.134 m) Feb. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 17.9 ft (5.46 m) Aug. 20, 1955, from high-water mark; minimum, -8.6 ft (-2.62 m) Dec. 31, 1962, at site 1.4 mi (2.2 km) downstream.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	8.27	6.07	6.48	8.03	5.88	8.50	8.03	6.90	6.92	6.73	6.35	7.51
high tide	Date	9	4	7	10	25	15	5	6	2	1	27	26
Minimum	Elevation	-3.62	-4.31	-5.10	-3.90	-4.27	-3.22	-3.50	-4.02	-4.02	-3.99	-3.74	-4.01
low tide	Date	16	23	3	5	16	3	23	9	3	26	30	11
Mean high tide		5.75	4.98	4.58	--	--	5.91	5.71	5.61	5.68	5.52	5.56	5.88
Mean water level		1.98	1.07	0.58	--	--	2.35	1.85	1.43	1.45	1.30	1.35	1.91
Mean low tide		-2.19	-3.13	-3.51	--	--	-1.52	-2.35	-3.12	-3.09	-3.27	-3.16	-2.44

NOTE.--Missing or doubtful gage-height record Jan. 1 to Feb. 9; Mar. 30 to Apr. 3.

01464290 CROSSWICKS CREEK AT HOCKAMIK ROAD NEAR COOKSTOWN, NJ

LOCATION.--Lat 40°02'10", long 74°32'11", Burlington County, Hydrologic Unit 02040201, at bridge on Hockamik Road, 2.8 mi (4.5 km) southeast of Cookstown, and 1.6 mi (2.6 km) southwest of Brindletown.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI- FORM .7UM-MF (COL./ 100 ML)	FECAL COLI- FORM (EC BROTH) (MPN)	FECAL STREP- TOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
12...	0930	210	7.1	12.0	7	7.1	5.8	800	23	--
NOV										
22...	0910	187	7.2	5.0	8	9.4	6.6	110	80	B32
FEB										
17...	0910	107	6.9	1.0	6	9.6	4.0	803	<2	B16
MAR										
30...	0900	127	7.0	13.5	6	6.9	4.9	50	2	160
MAY										
23...	0930	245	7.2	20.0	10	4.9	>8.4	50	46	B400
JUN										
22...	0850	205	7.5	18.5	4	4.9	7.9	560	11	500
JUL										
18...	0920	302	7.4	25.5	2	5.3	11	--	540	--
AUG										
08...	1055	135	6.8	25.0	5	3.5	4.1	--	350	--
SEP										
20...	0915	105	6.9	21.0	20	4.4	5.3	--	350	--

DATE	FECAL STREP- TOCOCCI (MPN)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)
OCT										
12...	49	39	0	12	2.2	13	4.0	49	0	40
NOV										
22...	8	33	0	10	1.9	11	3.8	41	0	34
FEB										
17...	8	20	0	5.8	1.4	7.5	2.5	24	0	20
MAR										
30...	9	32	15	9.4	2.0	9.0	2.4	21	0	17
MAY										
23...	14	54	0	16	3.4	17	5.4	66	0	54
JUN										
22...	130	53	7	16	3.1	23	5.2	56	0	46
JUL										
18...	240	49	0	15	2.7	21	5.6	63	0	52
AUG										
08...	130	31	11	9.3	1.8	9.2	3.1	24	0	20
SEP										
20...	>2400	25	15	7.3	1.6	6.5	2.6	12	0	10

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOL- VED SUL- FIDE (S) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT									
12...	6.2	.0	29	14	8.7	108	17	--	--
NOV									
22...	4.1	--	25	13	--	100	13	--	--
FEB									
17...	4.8	--	17	8.5	--	70	2	--	--
MAR									
30...	3.4	--	19	10	--	85	21	--	--
MAY									
23...	6.7	.0	29	17	8.5	149	30	--	--
JUN									
22...	2.8	--	31	30	--	164	14	--	--
JUL									
18...	4.0	--	20	28	--	137	22	.16	.08
AUG									
08...	6.1	--	22	11	--	79	17	.18	.04
SEP									
20...	2.4	.0	18	9.7	3.5	57	11	.51	.04

01464290 CROSSWICKS CREEK AT HOCKAMIK ROAD NEAR COOKSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 12...	--	--	4.8	210	--	1.1	--	9.1	2.8
NOV 22...	--	--	2.8	--	--	1.6	--	8.2	--
FEB 17...	--	--	3.6	--	--	.55	--	5.1	--
MAR 30...	--	--	4.2	--	--	.59	--	--	--
MAY 23...	--	--	7.6	--	--	1.5	--	7.5	--
JUN 22...	--	--	1.4	--	--	.82	--	7.1	--
JUL 18...	7.4	4.6	12	--	12	2.1	1.2	6.4	--
AUG 08...	2.3	1.1	3.4	--	3.6	.87	.56	5.1	--
SEP 20...	.89	.61	1.5	--	2.1	.36	.17	8.2	--

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	SUSPENDED ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)
OCT 12...	0930	220	210	10	1	1	90	0	0	4	0
MAY 23...	0930	--	--	20	1	--	120	0	--	--	0
SEP 20...	0915	--	--	10	1	--	70	0	--	--	0

DATE	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)
OCT 12...	0	0	10	5	2700	90	1100	6	4	100	8
MAY 23...	0	--	9	--	--	160	--	6	--	90	--
SEP 20...	0	--	8	--	--	190	--	17	--	60	--

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)
OCT 12...	<.5	.0	4	2	0	50	40	--	12	.0
MAY 23...	.0	--	4	--	0	40	--	10	--	--
SEP 20...	.0	--	6	--	0	200	--	0	--	--

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
OCT 12...	20	35	20	54	8.7	.0	.0	.0	.0	0
MAY 23...	--	--	--	--	--	--	--	--	--	--
SEP 20...	--	--	--	--	--	--	--	--	--	--

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ

LOCATION.--Lat 40°08'15", long 74°36'02", Mercer County, Hydrologic Unit 02040201, on right bank upstream from highway bridge at Extonville, 0.5 mi (0.8 km) upstream from Pleasant Run, and 0.7 mi (1.1 km) downstream from Mercer-Monmouth County line.

DRAINAGE AREA.--83.6 mi² (216.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1940 to current year.
CHEMICAL ANALYSES: Water years 1965 to current year.
SEDIMENT ANALYSES: Water years 1965-73, 1977.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: August 1940 to October 1951, October 1952 to current year.
WATER TEMPERATURES: October 1966 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: February 1965 to June 1970.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.94 ft (7.602 m) NGVD.

REMARKS.--Discharge records excellent. Flow regulated occasionally by lakes above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--36 years (1940-51, 1952-77), 132 ft³/s (3.738 m³/s), 21.44 in/yr (544 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 734 ft³/s (20.8 m³/s) Mar. 23, gage height, 6.77 ft (2.063 m), no peak above base of 750 ft³/s (21.2 m³/s); minimum, 21 ft³/s (0.59 m³/s) July 25, gage height, 2.33 ft (0.710 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,180 ft³/s (147 m³/s) Aug. 28, 1971, gage height, 13.93 ft (4.246 m); minimum, 13.1 ft³/s (0.37 m³/s) Feb. 14, 1942 (result of freezeup); minimum daily, 16 ft³/s (0.45 m³/s) Aug. 30 to Sept. 3, Sept. 12, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	154	58	52	68	142	95	102	33	31	62	118
2	77	103	54	58	66	126	102	92	37	28	249	102
3	56	90	52	56	60	118	148	87	37	25	151	85
4	58	84	54	58	58	121	129	87	35	25	150	70
5	48	77	46	56	60	144	291	106	31	25	120	60
6	46	73	46	58	56	126	422	116	37	25	95	75
7	44	66	121	62	56	112	211	104	60	33	136	87
8	43	66	448	60	58	104	151	87	46	39	106	67
9	50	62	192	58	62	97	129	85	82	33	75	55
10	103	62	105	125	60	92	120	87	151	30	65	55
11	64	62	97	496	112	87	114	77	108	27	77	52
12	48	60	93	406	348	85	110	70	82	46	65	44
13	44	58	86	141	404	92	108	65	67	172	65	50
14	43	58	71	112	402	136	106	65	55	102	168	87
15	41	56	68	108	194	127	102	62	60	60	418	44
16	43	56	66	95	130	116	97	52	62	44	250	40
17	50	56	73	88	103	104	92	50	50	37	135	57
18	48	56	71	79	90	112	87	48	44	31	121	75
19	43	56	64	75	81	165	85	52	40	30	97	55
20	54	56	64	75	84	129	82	52	39	27	88	126
21	348	54	90	71	90	124	80	48	60	27	62	144
22	266	52	79	66	81	217	77	44	46	27	116	121
23	103	52	68	64	86	606	75	44	37	27	121	108
24	86	52	64	64	110	364	77	42	33	23	174	177
25	86	52	71	64	552	192	121	39	31	23	202	389
26	121	52	62	64	541	141	116	39	35	28	135	433
27	158	54	66	62	292	124	124	37	35	27	106	226
28	103	56	62	58	180	116	118	35	33	24	87	151
29	90	66	62	64	---	114	129	31	48	23	72	129
30	81	75	60	68	---	110	118	31	40	24	62	108
31	105	---	58	68	---	106	---	33	---	31	60	---
TOTAL	2629	1976	2671	3031	4484	4549	3816	1969	1554	1154	3962	3390
MEAN	84.8	65.9	86.2	97.8	160	147	127	63.5	51.8	37.2	128	113
MAX	348	154	448	496	552	606	422	116	151	172	418	433
MIN	41	52	46	52	56	85	75	31	31	23	60	40
CFSM	1.01	.79	1.03	1.17	1.91	1.76	1.52	.76	.62	.45	1.53	1.35
IN.	1.17	.88	1.19	1.35	2.00	2.02	1.70	.88	.69	.51	1.76	1.51

CAL YR 1976 TOTAL 42489 MEAN 116 MAX 1300 MIN 28 CFSM 1.39 IN 18.91
WTR YR 1977 TOTAL 35185 MEAN 96.4 MAX 606 MIN 23 CFSM 1.15 IN 15.66

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
OCT 07...	1120	44	179	7.4	15.5	5	7.2	3.1	7500	110
NOV 22...	1020	54	178	6.8	3.0	5	10.4	2.3	50	20
FEB 10...	1200	60	193	6.9	.0	5	12.5	.8	100	11
10...	1300	60	--	--	.0	--	--	--	--	--
MAR 29...	1210	114	142	7.1	10.5	15	4.1	3.0	170	<2
MAY 25...	1130	41	182	7.6	21.0	6	2.5	2.9	230	22
JUN 20...	1110	37	166	7.8	22.0	8	3.6	5.7	220	110
JUL 20...	1140	27	197	7.5	25.0	2	4.9	3.8	--	240
AUG 15...	1135	399	226	6.7	22.0	15	5.0	3.9	--	>24000
SEP 21...	1245	130	144	6.9	19.5	25	6.5	4.7	--	490

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT 07...	--	540	51	11	16	2.6	7.1	3.6	49	0
NOV 22...	190	20	53	16	17	2.5	7.7	3.3	45	0
FEB 10...	120	79	50	16	16	2.4	9.4	3.0	41	0
10...	--	--	--	--	--	--	--	--	--	--
MAR 29...	370	220	44	27	13	2.7	5.7	2.8	21	0
MAY 25...	3200	130	60	28	19	3.0	8.6	3.7	39	0
JUN 20...	2100	490	51	21	16	2.6	7.6	3.4	37	0
JUL 20...	--	240	62	30	20	3.0	8.6	3.7	39	0
AUG 15...	--	2400	35	19	11	1.9	3.6	3.0	20	0
SEP 21...	--	>2400	41	25	13	2.1	5.4	3.3	20	0

DATE	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT 07...	40	3.1	.5	21	12	12	107	5	--	--
NOV 22...	37	11	--	24	12	--	116	6	--	--
FEB 10...	34	8.3	--	23	14	--	105	6	--	--
10...	--	--	--	--	--	--	--	--	8	1.4
MAR 29...	17	2.7	--	23	10	--	90	10	--	--
MAY 25...	32	1.6	--	22	13	--	119	8	--	--
JUN 20...	30	.9	--	19	11	--	107	6	--	--
JUL 20...	32	2.0	--	22	17	--	114	13	--	--
AUG 15...	16	6.4	--	21	6.1	--	74	37	--	--
SEP 21...	16	4.0	--	22	9.2	--	81	22	--	--

01464500 CROSSWICKS CREEK AT EXTONVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT									
07...	--	--	--	--	--	--	--	--	5.7
NOV									
22...	--	--	--	--	1.4	--	.33	--	3.2
FEB									
10...	--	--	--	--	5.6	--	.72	--	1.1
10...	--	--	--	--	--	--	--	--	--
MAR									
29...	--	--	--	--	2.0	--	.28	--	--
MAY									
25...	--	--	--	--	1.4	--	.06	--	8.1
JUN									
20...	--	--	--	--	1.4	--	.08	--	6.2
JUL									
20...	1.4	.06	.31	.67	.98	2.5	.20	.11	6.1
AUG									
15...	.48	.03	.38	.72	1.1	1.6	.21	.19	5.4
SEP									
21...	.84	.03	.28	.82	1.1	2.0	.43	.14	7.5

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
OCT									
07...	1120	60	20	1	60	0	0	0	10

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT								
07...	1600	420	1	60	<.5	2	0	10

01464505 CROSSWICKS CREEK NEAR GROVEVILLE, NJ

LOCATION.--Lat 40°10'26", long 74°40'48", Mercer County, Hydrologic Unit 02040201, at bridge on U.S. Route 130, 0.3 mi (0.5 km) upstream from Doctors Creek, 0.5 mi (0.8 km) northwest of Groveville, and 0.6 mi (1.0 km) southwest of Yardville.

DRAINAGE AREA.--94.5 mi² (244.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
07...	0830	249	7.3	15.0	9	6.6	2.2	530	80	--
NOV										
22...	0910	181	7.9	3.0	5	10.8	1.9	8140	49	210
FEB										
16...	1200	164	7.0	.0	6	8.6	2.8	8150	2	--
MAR										
29...	0915	166	7.2	9.0	15	9.2	4.0	210	5	380
MAY										
25...	0825	269	7.3	20.5	4	4.3	3.4	86400	>2400	1200
JUN										
20...	0845	179	7.3	22.0	9	6.8	2.8	600	200	1400
JUL										
20...	0900	251	7.6	22.5	3	5.0	3.4	--	1300	--
AUG										
15...	0920	133	6.8	23.0	35	--	5.2	--	5400	--
SEP										
21...	0830	175	7.6	20.0	35	7.3	4.1	--	240	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT										
07...	230	51	24	15	3.2	21	3.7	33	0	27
NOV										
22...	80	53	14	16	3.2	8.6	3.4	48	0	39
FEB										
16...	49	39	23	11	2.7	11	3.1	20	0	16
MAR										
29...	79	46	36	13	3.3	11	2.9	12	0	10
MAY										
25...	540	71	41	22	3.9	23	4.0	37	0	30
JUN										
20...	170	52	24	16	3.0	8.9	3.4	34	0	28
JUL										
20...	79	59	27	18	3.3	20	3.6	39	0	32
AUG										
15...	5400	40	20	12	2.5	5.0	3.6	24	0	20
SEP										
21...	>2400	56	30	18	2.8	8.3	3.8	32	0	26

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT									
07...	2.6	--	25	32	--	143	22	--	--
NOV									
22...	1.0	--	26	14	--	116	2	--	--
FEB									
16...	3.2	--	25	17	--	94	3	--	--
MAR									
29...	1.2	--	27	18	--	119	19	--	--
MAY									
25...	3.0	.0	27	34	9.7	151	1	--	--
JUN									
20...	2.7	--	22	14	--	110	8	--	--
JUL									
20...	1.6	--	26	32	--	140	4	1.4	.04
AUG									
15...	6.1	--	23	8.3	--	91	148	.08	.06
SEP									
21...	1.3	.5	24	13	9.7	101	31	.07	.02

0146505 CROSSWICKS CREEK NEAR GROVEVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	1.4	--	--	.52	--	6.3	--
NOV 22...	--	--	1.4	--	--	.33	--	3.8	--
FEB 16...	--	--	2.0	--	--	.18	--	8.2	--
MAR 29...	--	--	1.7	--	--	.25	--	--	--
MAY 25...	--	--	1.4	--	--	.03	--	5.9	--
JUN 20...	--	--	1.4	--	--	.09	--	4.6	--
JUL 20...	.04	.60	.64	--	2.0	.21	.12	5.2	--
AUG 15...	.50	1.3	1.8	--	2.7	.68	.28	6.0	--
SEP 21...	.70	.70	1.4	700	1.5	--	--	8.2	5.3

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 25...	0825	40	1	--	50	0	--	--	0	1
SEP 21...	0830	60	2	13	90	0	<10	<10	0	3

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 25...	--	8	--	40	--	7	--	120	--	.0
SEP 21...	<10	5	<10	50	16000	13	40	110	90	.0

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKFL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
MAY 25...	--	10	--	0	30	--	0	--	--	--
SEP 21...	.0	7	<10	0	30	60	8	3	.0	8

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
MAY 25...	--	--	--	--	--	--	--	--	--
SEP 21...	150	35	120	1.6	.0	.0	.0	.0	0

01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'57", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi (1.3 km) downstream from Conines Millpond dam.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1967 to current year.
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT 07...	1015	184	7.3	15.0	4	7.7	3.3	240	<2	--
NOV 22...	1100	187	7.9	3.5	4	12.5	1.9	60	<2	B16
FEB 10...	1030	210	6.9	1.0	4	12.9	.6	B160	<2	76
MAR 29...	1125	151	7.1	10.0	25	10.4	2.2	230	<20	B17
MAY 25...	1030	199	7.4	22.0	6	6.0	5.8	330	<2	B20
JUN 20...	1015	177	7.3	23.0	8	5.8	8.9	--	<2	49
JUL 20...	1045	219	7.4	24.5	7	3.8	7.7	--	8	--
AUG 15...	1055	145	6.7	23.0	15	6.8	2.2	--	>24000	--
SEP 21...	1100	161	7.3	19.5	9	7.5	2.1	--	33	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT 07...	<2	53	16	13	5.0	6.3	4.4	45	0	37
NOV 22...	<2	57	4	14	5.4	6.5	4.4	65	0	53
FEB 10...	<2	59	33	15	5.2	11	3.5	32	0	26
MAR 29...	9	51	39	12	5.0	6.4	3.3	15	0	12
MAY 25...	7	65	33	17	5.5	7.7	3.5	39	0	32
JUN 20...	2	55	21	14	4.9	7.3	2.9	41	0	34
JUL 20...	2	63	15	16	5.6	10	4.3	59	0	48
AUG 15...	>2400	45	28	11	4.3	4.1	4.0	21	0	17
SEP 21...	>2400	52	24	13	4.7	5.3	3.9	34	0	28

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 07...	3.6	--	17	17	--	102	1	--	--
NOV 22...	1.3	--	26	16	--	111	3	--	--
FEB 10...	6.4	--	25	24	--	124	7	--	--
MAR 29...	1.9	--	26	14	--	96	7	--	--
MAY 25...	2.5	--	22	16	--	115	0	--	--
JUN 20...	3.3	--	20	15	--	104	0	--	--
JUL 20...	3.8	--	20	19	--	120	7	.67	.26
AUG 15...	6.7	--	25	11	--	97	41	.27	.01
SEP 21...	2.7	.0	17	13	6.3	82	0	.29	.02

0146515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 07...	--	--	2.0	--	--	.42	--	5.0	--
NOV 22...	--	--	1.4	--	--	.10	--	4.2	--
FEB 10...	--	--	2.5	--	--	.17	--	2.2	--
MAR 29...	--	--	2.0	--	--	.24	--	--	--
MAY 25...	--	--	1.7	--	--	.13	--	6.0	--
JUN 20...	--	--	1.3	--	--	.33	--	6.9	--
JUL 20...	1.9	1.0	2.9	--	3.0	.73	.57	4.6	--
AUG 15...	.16	.47	.63	--	.91	.09	.03	4.9	--
SEP 21...	.40	.38	.78	620	1.1	.14	.10	8.5	4.9

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
SEP 21...	1100	0	0	8	60	0	<10	<10	0	0

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
SEP 21...	<10	2	<10	20	15000	8	54	90	90	.0

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
SEP 21...	.0	5	<10	0	10	40	0	10	.0	32

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 21...	47	31	55	.5	.0	.0	.0	.0	0

01464522 DOCTORS CREEK AT ROUTE 130 NEAR YARDVILLE, NJ

LOCATION.--Lat 40°10'31", long 74°40'33", Mercer County, Hydrologic Unit 02040201, at bridge on U.S. Route 130, 0.4 mi (0.7 km) northwest of Groveville, and 2.5 mi (4.0 km) southwest of Haines Corner.

DRAINAGE AREA.--25.8 mi² (66.8 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT 07...	0920	221	7.3	16.0	4	8.2	6.5	21	<2	--
NOV 22...	0940	222	6.9	3.0	5	12.4	5.5	B10	<2	B12
FEB 10...	0930	294	6.9	.5	8	11.3	2.3	B100	<2	B2
MAR 29...	1040	191	7.2	9.5	20	10.6	5.4	--	<2	B10
MAY 23...	0925	247	7.2	20.0	2	4.7	8.0	>170	>2400	B16000
JUN 20...	0920	213	7.4	21.0	6	7.1	6.4	--	<20	B12
JUL 20...	0945	279	7.5	24.0	3	5.3	--	--	5	--
AUG 15...	1005	169	7.0	21.5	10	7.5	4.2	--	920	--
SEP 21...	0940	199	7.5	18.5	9	7.7	2.6	--	<20	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT 07...	240	55	21	14	4.8	10	4.6	41	0	34
NOV 22...	<2	63	27	15	6.1	10	4.6	44	0	36
FEB 10...	<2	62	34	15	5.9	21	3.7	34	0	28
MAR 29...	23	54	41	13	5.3	11	3.5	16	0	13
MAY 23...	1600	91	53	24	7.5	13	4.2	46	0	38
JUN 20...	<2	61	27	15	5.7	12	3.6	41	0	34
JUL 20...	<2	66	10	16	6.4	18	5.6	68	0	56
AUG 15...	920	51	29	12	5.0	6.5	3.0	27	0	22
SEP 21...	<2	55	24	13	5.5	8.0	4.1	38	0	31

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT 07...	3.3	--	24	21	--	123	6	--	--
NOV 22...	8.9	--	32	20	--	127	14	--	--
FEB 10...	6.8	--	31	39	--	151	3	--	--
MAR 29...	1.6	--	32	21	--	116	15	--	--
MAY 23...	4.6	.0	28	22	5.8	133	3	--	--
JUN 20...	2.6	--	27	19	--	136	1	--	--
JUL 20...	3.4	--	29	27	--	130	8	1.4	.08
AUG 15...	4.3	--	27	13	--	103	23	.97	.03
SEP 21...	1.9	--	22	10	--	94	6	.91	.03

01464522 DOCTORS CREEK AT ROUTE 130 NEAR YARDVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
OCT 07...	--	--	2.5	--	--	.59	--	--	--
NOV 22...	--	--	4.2	--	--	.65	--	6.6	--
FEB 10...	--	--	3.9	--	--	.39	--	2.2	--
MAR 29...	--	--	2.8	--	--	.28	--	--	--
MAY 23...	--	--	1.8	--	--	.68	--	5.2	--
JUN 20...	--	--	1.7	--	--	.49	--	6.3	--
JUL 20...	3.7	1.9	5.6	--	7.1	1.4	1.1	5.8	--
AUG 15...	.44	.56	1.0	--	2.0	.22	.15	5.3	--
SEP 21...	.89	.51	1.4	820	2.3	.38	.37	7.6	5.3

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 23...	0925	30	1	--	60	0	--	--	0	3
SEP 21...	0940	--	--	15	--	--	<10	<10	--	--

DATE	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 23...	--	5	--	160	--	5	--	120	--	.0
SEP 21...	<10	--	<10	--	11000	--	33	--	30	--

DATE	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)
MAY 23...	--	6	--	0	10	--	0	--	--	--
SEP 21...	.0	--	<10	--	--	40	--	13	.0	0

DATE	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
MAY 23...	--	--	--	--	--	--	--	--	--
SEP 21...	.2	1.4	9.3	.6	.0	.0	.0	.0	0

01464531 BLACKS CREEK AT BORDENTOWN, NJ

LOCATION.--Lat 40°08'14", long 74°42'42", Burlington County, Hydrologic Unit 02040201, at bridge on U.S. Route 130, 1.0 mi (1.6 km) northeast of Fieldsboro, and 3.1 mi (4.9 km) southwest of Groveville.

DRAINAGE AREA.--14.5 mi³ (37.6 km³).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
12...	1245	258	7.2	12.0	13	8.6	16	B5100	<20	--
NOV										
22...	1245	228	7.2	4.5	2	11.0	3.6	72	<20	B28
FEB										
16...	1100	242	6.9	1.0	10	11.2	2.4	B640	<2	--
MAR										
30...	1340	233	6.9	17.5	10	9.0	>9.0	B1	<2	81
MAY										
23...	1300	260	7.4	20.0	20	4.9	4.5	<1	<2	B25
JUN										
22...	1330	292	7.5	21.0	15	6.6	8.5	--	<20	--
JUL										
18...	1445	301	7.2	27.0	10	5.1	13	--	<2	--
AUG										
08...	1400	241	7.4	25.0	5	6.6	10	--	920	--
SEP										
22...	1245	260	7.1	18.5	15	7.2	3.8	--	<20	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA+MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT										
12...	<2	66	25	18	5.2	15	5.7	50	0	41
NOV										
22...	<2	57	19	15	4.7	9.7	7.2	46	0	38
FEB										
16...	4	61	39	15	5.6	18	4.6	27	0	22
MAR										
30...	<2	63	43	16	5.6	14	4.2	24	0	20
MAY										
23...	<2	70	16	18	6.2	18	5.6	66	0	54
JUN										
22...	22	82	6	21	7.2	25	6.2	93	0	76
JUL										
18...	<2	68	--	19	5.0	19	6.2	--	0	--
AUG										
08...	920	71	34	20	5.0	15	4.0	45	0	37
SEP										
22...	<2	66	15	19	4.6	17	6.6	62	0	51

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT									
12...	5.0	--	27	22	--	145	20	--	--
NOV									
22...	4.6	--	31	20	--	133	18	--	--
FEB									
16...	5.4	--	32	32	--	151	14	--	--
MAR									
30...	4.8	--	35	23	--	142	10	--	--
MAY									
23...	4.2	.0	44	14	13	143	17	--	--
JUN									
22...	4.7	--	26	22	--	170	21	--	--
JUL									
18...	--	--	28	24	--	166	23	2.6	.14
AUG									
08...	2.9	--	30	21	--	142	9	.89	.07
SEP									
22...	7.9	.0	28	19	13	136	18	.81	.06

01464531 BLACKS CREEK AT BORDENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 12...	.46	1.0	1.5	--	2.1	.75	--	11	--
NOV 22...	3.6	.90	4.5	--	5.4	.07	--	8.9	--
FEB 16...	.61	1.1	1.7	--	3.2	.46	--	4.5	--
MAR 30...	--	--	3.1	--	--	.39	--	--	--
MAY 23...	--	--	5.6	--	--	1.5	--	7.1	--
JUN 22...	--	--	1.5	--	--	1.4	--	5.8	--
JUL 18...	4.0	4.1	8.1	--	11	2.2	1.9	5.9	--
AUG 08...	.99	1.8	2.8	--	3.8	1.4	.22	5.6	--
SEP 22...	.80	1.4	2.2	1000	3.1	1.3	.08	7.9	9.8

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	HEXAVALENT CHROMIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 23...	1300	10	1	--	70	0	--	--	0	3
SEP 22...	1245	20	0	14	140	0	<10	10	0	3

DATE	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 23...	--	80	--	400	--	8	--	150	--	.0
SEP 22...	<10	14	<10	150	6300	3	15	80	90	.0

DATE	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
MAY 23...	--	11	--	0	60	--	5	--	--	--
SEP 22...	.0	11	<10	0	20	50	0	12	.0	14

DATE	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
MAY 23...	--	--	--	--	--	--	--	--	--
SEP 22...	8.1	4.6	4.2	1.1	.0	.0	.0	.0	0

01464540 CRAFTS CREEK AT HEDDING, NJ

LOCATION.--Lat 40°06'01", long 74°45'23", Burlington County, Hydrologic Unit 02040201, at bridge on Old York Road, 0.2 mi (0.3 km) downstream from small tributary, 0.8 mi (1.3 km) southwest of Hedding, and 1.6 mi (2.6 km) southeast of Roebling.

DRAINAGE AREA.--10.6 mi² (27.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1959-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 22...	1140	233	6.8	3.0	2	12.5	1.0	120	130	875	50	69
FEB 17...	1220	309	6.1	.0	6	12.3	1.3	--	4	822	33	64
MAR 30...	1130	270	6.7	16.0	3	8.9	.7	872	130	26	<2	70
MAY 26...	0815	472	7.0	19.0	2	4.1	2.4	3500	2400	1500	490	98
JUN 22...	1120	380	7.4	20.0	15	5.5	1.9	1700	500	880	3500	66
JUL 18...	1200	272	7.4	25.5	3	4.3	2.9	--	5400	--	490	63
AUG 08...	1320	240	7.2	26.0	3	6.0	1.7	--	20	--	<20	61
SEP 20...	1305	230	7.4	22.0	20	6.7	2.0	--	>2400	--	>2400	56

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 22...	63	15	7.6	11	4.9	7	0	6	1.8	--	49	28
FEB 17...	58	14	7.1	24	4.2	7	0	6	8.9	--	41	49
MAR 30...	65	15	8.0	24	3.7	6	0	5	1.9	--	43	49
MAY 26...	74	21	11	46	6.5	29	0	24	158	.0	40	93
JUN 22...	50	15	7.0	22	5.4	20	0	16	1.3	--	40	45
JUL 18...	37	14	6.7	17	6.8	32	0	26	2.0	--	31	35
AUG 08...	47	14	6.2	16	4.0	17	0	14	1.7	--	38	32
SEP 20...	38	13	5.7	17	4.8	22	0	18	1.4	.0	29	33

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 22...	--	184	1	--	--	--	--	1.1	--	.01	--	1.0
FEB 17...	--	176	0	--	--	--	--	1.7	--	.05	--	5.4
MAR 30...	--	178	3	--	--	--	--	1.7	--	.03	--	--
MAY 26...	7.8	292	29	--	--	--	--	1.4	--	.02	--	7.2
JUN 22...	--	173	27	--	--	--	--	1.4	--	.01	--	4.6
JUL 18...	--	162	8	.45	.04	.28	1.4	1.7	2.2	.05	.03	7.4
AUG 08...	--	153	7	.62	.01	.10	.45	.55	1.2	.05	.00	6.3
SEP 20...	9.0	127	5	.66	.02	.09	.54	.63	1.3	.08	.01	5.9

01464540 CRAFTS CREEK AT HEDDING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
26...	0815	40	1	60	0	0	3	0
SEP								
20...	1305	0	1	30	0	0	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
26...	100	9	610	.0	10	0	30	2
SEP								
20...	60	11	150	.0	7	0	40	0

01464580 ASSICUNK CREEK AT COLUMBUS, NJ

LOCATION.--Lat 40°03'25", long 74°43'27", Burlington County, Hydrologic Unit 02040201, at bridge on U.S. Route 206, 100 ft (30 m) downstream from small tributary, 1.1 mi (1.8 km) south of Columbus, and 2.1 mi (3.4 km) northwest of Jobstown.

DRAINAGE AREA.--8.28 mi² (21.45 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1958-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./ 100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)
OCT										
12...	1055	255	6.2	9.0	12	8.4	1.3	380	<20	--
NOV										
22...	1015	205	6.4	3.0	9	10.7	7.4	<4	<20	820
FEB										
17...	1030	199	6.0	.0	10	10.2	1.0	88	<2	820
MAR										
30...	1000	174	6.2	13.5	6	7.8	1.3	817	8	200
MAY										
23...	1105	175	6.5	16.0	30	6.0	1.2	310	110	410
JUN										
22...	1000	165	6.7	15.0	1	5.1	--	1200	<200	940
JUL										
18...	1020	170	5.6	21.0	1	4.7	1.3	--	540	--
AUG										
08...	1155	193	5.9	21.5	6	6.9	.5	--	540	--
SEP										
20...	1040	157	6.2	20.0	45	6.6	4.8	--	>2400	--

DATE	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT										
12...	130	73	69	20	5.5	5.7	7.4	5	0	4
NOV										
22...	<20	62	55	17	4.7	4.5	5.0	9	0	7
FEB										
17...	9	63	58	17	5.0	5.2	4.7	6	0	5
MAR										
30...	21	58	54	15	5.1	4.9	4.4	5	0	4
MAY										
23...	27	61	51	15	5.6	5.8	5.0	12	0	10
JUN										
22...	230	48	38	12	4.3	5.6	4.5	12	0	10
JUL										
18...	1600	47	46	12	4.2	5.9	5.4	1	0	1
AUG										
08...	920	64	60	18	4.7	5.0	6.2	5	0	4
SEP										
20...	>2400	45	39	12	3.6	3.9	7.0	7	0	6

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
OCT									
12...	5.0	--	74	15	--	159	10	--	--
NOV									
22...	5.7	--	60	12	--	148	3	--	--
FEB									
17...	9.6	--	52	12	--	147	15	--	--
MAR									
30...	5.8	--	48	12	--	122	4	--	--
MAY									
23...	6.1	.0	37	16	15	124	25	--	--
JUN									
22...	3.8	--	40	13	--	101	20	--	--
JUL									
18...	4.0	--	46	14	--	115	13	.19	.00
AUG									
08...	10	--	56	11	--	154	8	.34	.01
SEP									
20...	7.1	.0	36	11	14	106	21	.70	.02

01464580 ASSICUNK CREEK AT COLUMBUS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOT-TOM MA-TERIAL (C) (G/KG)
OCT 12...	--	--	1.0	--	--	.49	--	3.6	--
NOV 22...	--	--	1.3	--	--	.05	--	1.6	--
FEB 17...	--	--	1.5	--	--	.06	--	2.0	--
MAR 30...	--	--	1.7	--	--	.06	--	--	--
MAY 23...	--	--	1.4	--	--	.06	--	8.1	--
JUN 22...	--	--	1.1	--	--	.30	--	6.3	--
JUL 18...	.28	.34	.62	--	.81	.11	.01	5.8	--
AUG 08...	.17	.46	.63	--	.98	.16	.02	6.0	--
SEP 20...	.10	1.0	1.1	860	1.8	.40	.02	7.6	4.2

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
MAY 23...	1105	30	3	--	50	0	--	--	0	0
SEP 20...	1040	60	2	9	100	0	<10	<10	0	3

DATE	TOTAL COBALT IN BOTTOM MA-TERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MA-TERIAL (UG/G)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY (HG) (UG/L)
MAY 23...	--	0	--	2900	--	6	--	270	--	.0
SEP 20...	<10	3	<10	120	2200	17	61	150	30	.0

DATE	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MA-TERIAL (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)	PHENOLS (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)
MAY 23...	--	10	--	0	40	--	6	--	--	--
SEP 20...	.0	11	<10	0	40	30	0	0	.0	0

DATE	DDD IN BOTTOM MA-TERIAL (UG/KG)	DDE IN BOTTOM MA-TERIAL (UG/KG)	DDT IN BOTTOM MA-TERIAL (UG/KG)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
MAY 23...	--	--	--	--	--	--	--	--	--
SEP 20...	1.2	.6	.4	.0	.0	.0	.0	.0	0

01464590 ASSICUNK CREEK NEAR BURLINGTON, NJ

LOCATION.--Lat 40°04'19", long 74°47'57", Burlington County, Hydrologic Unit 02040201, at bridge on Old York Road, 1.4 mi (2.3 km) southwest of Bustleton, and 2.8 mi (4.5 km) northeast of Deacons.

DRAINAGE AREA.--37.2 mi² (96.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 12...	1145	228	6.6	11.0	14	7.8	2.5	9000	170	--	330	65
NOV 22...	1100	181	6.9	3.0	2	11.8	6.0	8110	20	80	<20	63
FEB 17...	1135	181	6.1	.0	8	9.4	2.1	842	5	270	110	50
MAR 30...	1040	171	6.6	14.5	5	7.9	1.1	200	79	54	33	65
MAY 23...	1200	181	7.3	21.0	10	5.8	1.5	1100	330	960	1600	70
JUN 22...	1040	175	7.3	19.5	5	4.9	1.4	1800	80	1000	1300	53
JUL 18...	1110	181	6.8	25.5	5	5.0	2.4	--	9200	--	1100	53
AUG 08...	1240	144	6.7	24.0	8	6.3	1.3	--	330	--	330	48
SEP 20...	1145	170	6.8	21.0	80	6.1	3.1	--	>2400	--	>2400	47

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT 12...	59	16	6.0	6.4	7.7	7	0	6	2.8	55	16	133
NOV 22...	53	16	5.7	5.6	4.5	12	0	10	2.4	45	15	113
FEB 17...	44	12	4.8	7.3	4.0	7	0	6	8.9	36	16	210
MAR 30...	60	16	6.0	6.7	3.6	6	0	5	2.4	40	16	119
MAY 23...	55	17	6.8	6.5	4.6	18	0	15	1.4	32	15	122
JUN 22...	37	13	5.0	6.4	4.7	20	0	16	1.6	33	15	113
JUL 18...	39	13	5.0	5.7	5.0	17	0	14	4.3	38	12	113
AUG 08...	38	12	4.3	4.6	4.9	12	0	10	3.8	35	10	107
SEP 20...	33	11	4.8	6.8	7.0	17	0	14	4.3	29	16	110

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BOTTOM MATERIAL (C) (G/KG)
OCT 12...	13	--	--	--	--	1.0	--	--	.11	--	7.1	--
NOV 22...	2	--	--	--	--	1.1	--	--	.02	--	1.5	--
FEB 17...	8	--	--	--	--	1.8	--	--	.07	--	7.2	--
MAR 30...	1	--	--	--	--	1.7	--	--	.05	--	--	--
MAY 23...	17	--	--	--	--	1.7	--	--	.07	--	6.3	--
JUN 22...	16	--	--	--	--	1.1	--	--	.02	--	5.4	--
JUL 18...	12	.60	.01	.13	.59	.72	--	1.3	.11	.06	7.0	--
AUG 08...	24	.45	.01	.14	.77	.91	--	1.4	.17	.02	5.2	--
SEP 20...	8	1.1	.03	.25	.95	1.2	8800	2.3	.35	.10	6.4	32

01464590 ASSICUNK CREEK NEAR BURLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
SEP 20...	1145	23	<10	<10	<10	<10	2300	44	200	.0	<10	110

DATE	PCB IN BOTTOM MATERIAL (UG/KG)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	DDD IN BOTTOM MATERIAL (UG/KG)	DDE IN BOTTOM MATERIAL (UG/KG)	DDT IN BOTTOM MATERIAL (UG/KG)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)
SEP 20...	17	.0	0	99	66	15	2.3	.0	.0	.0	.0	0

01464598 DELAWARE RIVER AT BURLINGTON, NJ

LOCATION.--Lat 40°04'42", long 74°52'28", Burlington County, Hydrologic Unit 02040201, on left bank at the intake canal of the Public Service Gas and Electric Company, 0.3 mi (0.5 km) downstream from Burlington-Bristol Bridge, 1.4 mi (2.3 km) downstream from Assiscunk Creek, and at river mile 117.40 (188.89 km).

DRAINAGE AREA.--7,160 mi^2 (18,540 km^2).

PERIOD OF RECORD.--
TIDE ELEVATIONS: July 1964 to current year. March 1921 to July 1926, January 1931 to November 1939, August 1951 to June 1954, July 1957 to June 1964, in files of Philadelphia District Corps of Engineers.

REVISED RECORDS.--WDR NJ-76-1: 1973(m).

GAGE.--Water-stage recorder. Datum of gage is -12.90 ft (-3.932 m) NGVD. Prior to May 20, 1971, water-stage recorder at site 0.8 mi (1.3 km) upstream at same datum. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 7.32 ft (2.231 m) Apr. 5; minimum, -5.46 ft (-1.664 m) Jan. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.58 ft (2.615 m) June 30, 1973; minimum, -6.60 ft (-2.012 m) Feb. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 10.8 ft (3.29 m) Aug. 20, 1955, from high-water mark at site 1.4 mi (2.3 km) upstream; minimum, -9.1 ft (-2.77 m) Dec. 31, 1962, at present site.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.49	5.50	5.96	6.41	5.45	7.04	7.32	6.26	6.30	6.06	5.79	6.95
high tide	Date	9	4	7	10	25	16	5	6	2	1	1	26
Minimum	Elevation	-3.47	-4.07	-5.41	-5.46	-5.00	-3.32	-3.52	-4.11	-3.94	-3.97	-3.37	-3.65
low tide	Date	16	23,24	22	1	6	19	9	9	3	26	29	14,15
Mean high tide		5.15	4.38	3.88	3.24	3.74	5.09	5.03	4.99	5.05	4.84	4.89	5.38
Mean water level		1.68	0.85	0.34	0.11	0.51	1.62	1.40	1.20	1.30	1.08	1.16	1.80
Mean low tide		-2.08	-2.89	-3.36	-3.24	-2.91	-1.99	-2.41	-2.84	-2.75	-2.95	-2.83	-2.04

01465810 GUM SPRING AT FOURMILE, NJ

LOCATION.--Lat 39°52'52", long 74°35'43", Burlington County, Hydrologic Unit 02040202, at bridge on unnamed road, 0.5 mi (0.8 km) south of Four Mile Circle, 0.7 mi (1.1 km) upstream from mouth, and approximately 4.7 mi (7.6 km) southwest of Mount Misery.

DRAINAGE AREA.--0.65 mi² (1.68 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1030	139	8.3	21.0	4	6.0	5.5	<2	34	7	0	6
27...	1025	135	7.7	26.0	6	8.8	7.1	7	13	10	0	8
JUL												
28...	0955	147	8.6	23.0	7	8.9	8.9	49	49	14	0	11
AUG												
22...	0955	138	7.4	23.0	5	6.6	7.0	49	49	23	0	19
SEP												
28...	0940	137	6.8	19.0	7	8.7	4.0	33	>2400	12	0	10

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.1	83	13	.28	.01	.02	.80	.82	1.1	6.1	.00
27...	.3	82	61	.02	.00	.03	1.7	1.7	1.7	6.0	.00
JUL											
28...	.1	77	21	.12	.01	.14	1.1	1.2	1.3	5.1	.00
AUG											
22...	1.5	84	2	.10	.01	.29	1.9	2.2	2.3	7.9	.00
SEP											
28...	3.0	62	21	.06	.00	.06	1.1	1.2	1.3	8.7	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1025	0	<10	5	8	790	8	190	19	50

01465835 SOUTH BRANCH RANCOCAS CREEK AT RETREAT, NJ

LOCATION.--Lat 39°55'23", long 74°43'05", Burlington County, Hydrologic Unit 02040202, at bridge on light-duty road, 1.2 mi (1.9 km) southwest of Buddtown, and 1.8 mi (2.9 km) northeast of Beaverville.

DRAINAGE AREA.--44.4 mi² (115.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	0915	82	4.0	3.0	2	12.0	.9	74	5	42	2	13
FEB 15...	0950	70	4.7	1.0	2	7.8	1.3	86	<2	830	70	11
MAR 24...	1205	72	4.3	6.0	5	11.4	1.1	86	5	59	5	19
MAY 12...	1135	62	4.6	14.0	4	8.7	2.2	320	1600	390	49	13
JUN 01...	0920	74	4.2	20.0	5	7.6	1.3	--	<2	--	1600	9
JUL 18...	1115	72	4.3	28.0	2	6.1	1.4	--	79	--	79	11
AUG 17...	1135	88	4.1	25.0	2	6.5	1.1	--	79	--	34	17

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	13	2.7	1.4	3.4	1.2	0	0	0	.0	17	4.8
FEB 15...	11	2.7	1.1	3.1	1.6	0	0	0	.0	14	4.9
MAR 24...	19	5.2	1.4	3.0	1.4	0	0	0	.0	15	4.3
MAY 12...	12	3.7	1.0	3.1	1.4	1	0	1	40	11	5.3
JUN 01...	9	2.1	.9	3.4	1.4	0	0	0	.0	14	5.4
JUL 18...	11	2.5	1.1	3.3	1.3	0	0	0	.0	13	5.1
AUG 17...	17	4.5	1.3	3.2	1.6	0	0	0	.0	19	4.6

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	58	2	--	--	--	--	1.4	--	.01	--	14
FEB 15...	50	3	--	--	.08	.21	.29	.59	.04	--	7.6
MAR 24...	46	10	--	--	--	--	--	--	--	--	--
MAY 12...	38	8	--	--	--	--	1.4	--	.08	--	7.5
JUN 01...	42	8	--	--	.08	.64	.72	.73	.09	--	6.9
JUL 18...	40	9	.02	.00	.12	.68	.80	.82	.10	.05	7.0
AUG 17...	51	14	.06	.00	.15	.47	.62	.68	.06	.04	8.2

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ

LOCATION.--Lat 39°56'22", long 74°45'50", Burlington County, Hydrologic Unit 02040202, at bridge on Lumberton-Vincentown Road, 0.8 mi (1.3 km) west of Vincentown, 2.9 mi (4.7 km) southeast of Lumberton, and 3.1 mi (5.0 km) upstream from Southwest Branch.

DRAINAGE AREA.--53.3 mi² (138.0 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1961 to current year.
CHEMICAL ANALYSES: Water years 1925, 1959-62, 1975 to current year.

COOPERATION.-Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	1145	86	4.7	5.0	3	11.6	1.2	E40	33	92	50	23
FEB 01...	1330	95	5.6	.0	3	12.8	--	48	5	84	2	21
MAR 30...	1335	79	5.0	17.0	2	8.8	2.6	20	<2	>80	4	21
MAY 19...	1050	76	6.3	20.5	4	6.6	1.9	390	350	220	330	32
JUN 16...	1220	73	5.6	21.0	4	6.3	2.9	--	2400	3700	230	20
JUL 20...	1340	100	6.4	26.5	3	1.2	4.1	--	>2400	--	920	26
AUG 16...	1200	137	5.3	23.5	3	5.8	2.0	--	240	--	350	36

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	22	6.3	1.7	3.7	1.6	1	0	1	32	--	22	6.6
FEB 01...	18	5.8	1.5	4.9	1.8	4	0	3	16	--	19	6.1
MAR 30...	19	5.8	1.6	3.7	1.4	2	0	2	32	--	18	6.2
MAY 19...	25	5.8	4.3	5.0	2.0	9	0	7	7.2	.0	34	22
JUN 16...	16	5.7	1.3	3.5	1.6	5	0	4	20	--	18	5.3
JUL 20...	12	8.1	1.4	5.9	2.3	17	0	14	11	--	15	7.0
AUG 16...	32	10	2.6	4.8	3.0	5	0	4	40	--	36	6.4

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	76	6	--	--	--	--	1.4	--	.05	--	6.6
FEB 01...	--	62	2	--	--	--	--	1.7	--	.07	--	6.4
MAR 30...	--	60	0	--	--	--	--	1.7	--	.05	--	--
MAY 19...	3.4	57	7	--	--	--	--	1.4	--	.15	--	7.1
JUN 16...	--	51	0	--	--	--	--	1.3	--	.06	--	5.9
JUL 20...	--	66	5	.27	.01	.19	.69	.88	1.2	.47	.26	5.8
AUG 16...	--	86	14	.37	.01	.15	.45	.60	.98	.15	.08	5.1

01465850 SOUTH BRANCH RANCOCAS CREEK AT VINCENTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 19...	1050	90	1	40	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 19...	330	5	40	.0	5	0	20	1

01465900 SOUTHWEST BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ

LOCATION.--Lat 39°56'49", long 74°47'58", Burlington County, Hydrologic Unit 02040202, at bridge on East Bella Bridge Road, 0.5 mi (0.8 km) west of Eayrestown, 2.7 mi (4.3 km) west of Vincentown, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--76.0 mi^2 (196.8 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1925, 1959-61, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	1115	153	6.7	5.0	15	10.8	1.8	8270	790	220	50	45
FEB 01...	1225	162	6.5	.0	5	14.4	--	8260	13	56	140	41
MAR 30...	1100	111	6.8	15.0	5	8.9	3.3	120	7	360	33	39
MAY 19...	0930	154	6.9	19.5	8	4.5	5.5	87900	5400	6000	1700	39
JUN 16...	1110	151	6.8	21.0	3	4.8	5.1	3600	50	3300	140	46
JUL 20...	1240	187	7.0	26.0	1	3.2	6.4	--	350	--	350	46
AUG 16...	1110	163	6.3	23.5	5	6.4	2.9	--	110	--	920	51

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	26	14	2.4	7.6	3.0	23	0	19	7.3	--	29	9.3
FEB 01...	22	13	2.0	11	3.0	23	0	19	12	--	25	14
MAR 30...	26	12	2.2	5.8	2.4	16	0	13	4.1	--	23	8.9
MAY 19...	12	13	1.7	8.7	3.8	33	0	27	6.6	.0	14	7.9
JUN 16...	21	14	2.1	7.7	3.3	28	0	23	7.1	--	24	9.5
JUL 20...	5	14	2.3	12	5.2	48	0	39	7.7	--	20	14
AUG 16...	35	16	2.7	6.4	3.7	20	0	16	16	--	38	8.6

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	103	48	--	--	--	--	1.6	--	.25	--	7.4
FEB 01...	--	95	8	--	--	--	--	2.5	--	.39	--	5.0
MAR 30...	--	82	1	--	--	--	--	2.0	--	.20	--	--
MAY 19...	7.2	99	11	--	--	--	--	1.4	--	.65	--	6.7
JUN 16...	--	95	10	--	--	--	--	1.4	--	.59	--	6.0
JUL 20...	--	103	4	.68	.01	1.9	.80	2.7	3.4	1.2	.87	5.2
AUG 16...	--	119	20	.50	.03	.23	.64	.87	1.4	.47	.27	5.8

01465900 SOUTHWEST BRANCH RANCOCAS CREEK AT EAYRESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 19...	0930	10	1	70	0	0	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 19...	240	4	60	.0	8	0	20	2

01465915 SOUTH BRANCH RANCOCAS CREEK AT HAINESPORT, NJ

LOCATION.--Lat 39°58'44", long 74°49'28", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 38, 0.4 mi (0.6 km) west of intersection of State Route 38 with Hainesport Road, and 1.8 mi (2.9 km) west of intersection of State Route 38 with State Route 541.

DRAINAGE AREA.--156 mi² (404 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	0930	128	6.3	5.0	4	10.2	1.5	E80	490	B150	130	37
FEB 16...	1020	111	6.5	.5	4	12.0	1.9	40	2	250	79	34
MAR 30...	0855	101	6.4	13.0	6	7.8	3.0	B44	23	120	22	31
MAY 19...	0720	122	6.7	21.5	7	7.0	2.1	B2300	130	520	70	30
JUN 16...	0925	134	6.6	20.5	3	4.9	3.7	B6400	490	B25000	70	37
JUL 20...	1035	154	7.0	28.5	4	6.6	4.3	--	130	--	240	38
AUG 17...	0900	141	6.1	24.5	2	4.3	3.3	--	1400	--	170	41

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	26	11	2.3	5.3	2.6	13	0	11	10	27	8.0
FEB 16...	26	10	2.1	5.8	2.6	10	0	8	5.1	24	9.4
MAR 30...	22	8.8	2.2	4.8	2.1	11	0	9	7.0	22	8.0
MAY 19...	17	8.1	2.4	8.3	2.3	16	0	13	5.1	20	11
JUN 16...	21	11	2.2	6.1	3.1	20	0	16	8.0	24	8.6
JUL 20...	17	11	2.5	11	2.7	26	0	21	4.2	22	13
AUG 17...	29	12	2.7	6.3	3.2	15	0	12	19	29	8.8

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	87	7	--	--	--	--	1.4	--	.20	--	5.0
FEB 16...	77	6	--	--	--	--	1.7	--	.14	--	4.2
MAR 30...	74	10	--	--	--	--	2.0	--	.12	--	--
MAY 19...	81	27	--	--	--	--	1.4	--	.12	--	9.0
JUN 16...	75	22	--	--	--	--	1.3	--	.39	--	5.2
JUL 20...	66	19	.29	.01	.19	1.2	1.4	1.7	.40	.10	7.0
AUG 17...	88	13	.35	.01	.29	.81	1.1	1.5	.34	.14	9.0

01465970 NORTH BRANCH RANCOCAS CREEK AT BROWNS MILLS, NJ

LOCATION.--Lat 39°58'04", long 74°34'48", Burlington County, Hydrologic Unit 02040202, at bridge on Lakehurst Road at outflow of Mirror Lake, 1.5 mi (2.4 km) north of Browns Mills Junction, and 2.0 mi (3.2 km) northwest of outflow of Country Lake.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	1145	58	4.8	4.5	2	12.4	1.0	100	<2	B10	2	12
FEB 15...	1245	62	4.9	3.0	3	12.6	1.0	B490	<2	B140	49	15
MAR 24...	0900	52	5.6	6.0	8	11.9	1.8	30	2	330	33	15
MAY 12...	0755	50	5.9	14.5	3	9.6	1.3	B16	33	77	5	11
JUN 20...	0750	43	5.5	23.0	6	7.4	1.9	B43	7	140	20	11
JUL 18...	0845	46	5.9	27.0	2	6.4	2.6	--	33	--	79	10
AUG 16...	1300	51	5.2	26.0	3	7.3	2.3	--	41	--	240	11

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	11	2.8	1.3	2.9	1.1	1	0	1	25	13	4.5
FEB 15...	14	3.6	1.4	4.4	1.3	1	0	1	20	12	7.0
MAR 24...	12	3.7	1.4	3.2	1.4	4	0	3	16	13	4.7
MAY 12...	8	2.6	1.0	3.0	1.0	4	0	3	8.1	9.2	5.0
JUN 20...	9	2.6	1.0	3.0	.9	2	0	2	10	6.8	5.1
JUL 18...	6	2.4	1.0	3.0	1.0	5	0	4	10	6.7	4.6
AUG 16...	10	2.5	1.1	3.0	.8	1	0	1	10	9.8	4.4

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	38	4	--	--	--	--	1.4	--	.01	--	2.8
FEB 15...	67	5	--	--	--	--	1.4	--	.03	--	4.6
MAR 24...	42	15	--	--	--	--	2.0	--	.04	--	--
MAY 12...	39	7	--	--	--	--	1.1	--	.03	--	7.0
JUN 20...	38	8	--	--	--	--	1.4	--	.02	--	5.3
JUL 18...	35	3	.00	.00	.04	.30	.34	.34	.03	.01	8.5
AUG 16...	39	8	.03	.00	.02	.29	.31	.34	.05	.01	6.7

01466130 POLE BRIDGE BRANCH NEAR BUCKINGHAM, NJ

LOCATION.--Lat 39°56'43", long 74°28'52", Ocean County, Hydrologic Unit 02040202, at bridge on unnamed road, 0.6 mi (1.0 km) downstream from Deer Park Branch, 2.0 mi (3.2 km) northwest of Buckingham, and 5.5 mi (8.8 km) west of Whiting.

DRAINAGE AREA.--12.8 mi^2 (33.2 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN												
01...	1225	38	4.3	16.0	3	4.5	.5	<2	4	0	0	0
27...	1205	41	4.3	18.0	3	3.3	1.5	5	7	0	0	0
JUL												
28...	1115	32	4.4	15.0	4	2.8	1.0	49	--	0	0	0
AUG												
22...	1100	64	4.1	16.0	3	3.7	.9	700	240	0	0	0
SEP												
28...	1040	91	3.7	16.0	2	4.4	.9	<2	<2	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN											
01...	.0	43	2	.01	.00	.02	.16	.18	.19	8.5	.01
27...	.0	30	6	.01	.00	.01	.36	.37	.38	8.0	.01
JUL											
28...	.0	31	5	.01	.00	.10	.45	.55	.56	6.2	.00
AUG											
22...	.0	37	4	.03	.00	.03	.21	.24	.27	8.4	.00
SEP											
28...	.0	38	8	.01	.00	.01	.28	.29	.30	9.5	.00

01466200 POLE BRIDGE BRANCH NEAR BROWNS MILLS, NJ

LOCATION.--Lat 39°56'48", long 74°33'22", Burlington County, Hydrologic Unit 02040202, at bridge on unnamed road, 200 ft (61.0 m) downstream from outlet of Country Lake, approximately 2.2 mi (3.5 km) southeast of Browns Mills, and 2.6 mi (4.2 km) east of Whitesbog.

DRAINAGE AREA.--24.9 mi² (64.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI (MPN)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
JUN												
01...	1200	54	4.2	22.0	8	7.6	2.2	<2	540	0	0	0
27...	1125	55	4.3	28.0	10	7.7	2.3	9	70	0	0	0
JUL												
28...	1045	53	5.1	23.0	20	7.0	2.9	110	110	2	0	2
AUG												
22...	1040	57	4.5	22.0	7	7.2	2.6	7	33	0	0	0
SEP												
28...	1015	66	4.1	19.0	4	8.5	1.1	14	33	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)
JUN											
01...	.0	30	7	.02	.00	.03	.56	.59	.61	8.4	.02
27...	.0	37	5	.00	.00	.00	.57	.57	.57	5.8	.01
JUL											
28...	25	44	6	.03	.00	.04	.81	.85	.88	7.2	.02
AUG											
22...	.0	25	2	.01	.00	.01	.58	.59	.60	9.0	.02
SEP											
28...	.0	29	3	.12	.00	.07	.30	.37	.49	9.1	.00

DATE	TIME	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN										
27...	1125	0	<10	0	5	3000	8	40	11	20

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ
(Hydrologic bench-mark station)

LOCATION.--Lat 39°53'05", long 74°30'20", Burlington County, Hydrologic Unit 02040202, on right bank in Lebanon State Forest, 25 ft (7.6 m) upstream from Butterworth Road Bridge, 3.4 mi (5.5 km) upstream from confluence with Cooper Branch, and 7.0 mi (11.3 km) southeast of Browns Mills.

DRAINAGE AREA.--2.31 mi² (5.98 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1953 to current year. Prior to October 1962, published as "McDonald Branch in Lebanon State Forest".
CHEMICAL ANALYSES: Water years 1963 to current year.
SEDIMENT ANALYSES: Water years 1969-72, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1953 to current year.
SPECIFIC CONDUCTANCE: October 1968 to current year.
WATER TEMPERATURES: October 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 117.73 ft (35.884 m) NGVD (levels from New Jersey Geological Survey bench mark).

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor since October 1968.

REMARKS.--Discharge records fair. Gage-height record is collected above concrete control and discharge record, which includes leakage around control, is at site 785 ft (239 m) downstream. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

AVERAGE DISCHARGE.--24 years, 2.29 ft³/s (0.065 m³/s), 13.46 in/yr (342 mm/yr).

EXTREMES FOR CURRENT YEAR.--
WATER DISCHARGE: Maximum discharge, 3.8 ft³/s (0.108 m³/s) Mar. 23, gage height, 1.41 ft (0.430 m), no peak above base of 7.0 ft³/s (0.198 m³/s); minimum daily, 0.90 ft³/s (0.025 m³/s) July 23-25, Sept. 4.
SPECIFIC CONDUCTANCE: Maximum, 103 micromnos Mar. 23, 24; minimum, 22 micromhos Sept. 5.
WATER TEMPERATURES: Maximum, 19.0°C on many days in July and September; minimum, 2.0°C Jan. 17, 18, Feb. 27.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER DISCHARGE: Maximum discharge, 35 ft³/s (0.991 m³/s) Aug. 25, 1968, gage height, 2.33 ft (0.710 m); minimum daily, 0.8 ft³/s (0.023 m³/s) July 6, 19, 1967.
SPECIFIC CONDUCTANCE: Maximum, 182 micromhos June 16, 1969; minimum, 21 micromhos Sept. 27, 1970, Sept. 1, 1975.
WATER TEMPERATURES: Maximum, 22.0°C Aug. 1, 1970; minimum, 0.0°C on many days during winter months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.6	1.3	1.1	1.1	1.2	1.8	1.5	1.3	1.1	1.1	.96
2	1.1	1.5	1.1	1.1	1.1	1.2	2.0	1.5	1.2	1.1	1.1	.93
3	1.1	1.4	1.1	1.1	1.1	1.2	2.1	1.5	1.2	1.0	1.4	.93
4	1.1	1.4	1.1	1.1	1.1	1.2	2.0	1.5	1.2	1.0	1.3	.90
5	1.1	1.4	1.1	1.1	1.1	1.2	2.4	1.7	1.2	1.0	1.1	1.1
6	1.1	1.4	1.1	1.1	1.1	1.2	2.4	1.5	1.2	1.0	1.1	1.7
7	1.1	1.3	1.6	1.1	1.1	1.2	2.5	1.5	1.3	1.1	1.1	1.5
8	1.1	1.3	1.7	1.1	1.1	1.2	2.4	1.5	1.2	1.1	1.0	1.3
9	1.3	1.3	1.7	1.8	1.1	1.2	2.3	1.4	1.6	1.0	1.0	1.2
10	1.3	1.3	1.6	2.9	1.1	1.2	2.1	1.4	1.8	.99	1.1	1.1
11	1.1	1.3	1.5	3.5	1.1	1.2	2.0	1.4	1.6	.99	1.2	1.1
12	1.1	1.3	1.4	2.0	1.1	1.2	1.9	1.4	1.3	1.1	1.1	1.1
13	1.1	1.3	1.3	1.4	1.1	1.2	2.0	1.5	1.3	1.1	1.1	1.0
14	1.1	1.3	1.3	1.3	1.1	1.2	2.0	1.3	1.2	1.0	1.2	1.0
15	1.1	1.3	1.3	1.3	1.0	1.2	2.0	1.3	1.5	.99	1.1	1.0
16	1.1	1.3	1.1	1.3	1.1	1.2	1.9	1.3	1.3	.96	1.1	1.0
17	1.1	1.3	1.1	1.2	1.1	1.5	1.8	1.3	1.3	.96	1.1	2.1
18	1.1	1.1	1.1	1.2	1.1	1.8	1.8	1.2	1.2	.96	1.2	1.8
19	1.1	1.1	1.1	1.2	1.1	1.8	1.8	1.3	1.2	.93	1.1	1.5
20	1.4	1.1	1.3	1.2	1.1	1.7	1.5	1.2	1.1	.93	1.0	1.5
21	1.8	1.1	1.4	1.2	1.1	1.6	1.5	1.2	1.2	.93	.99	1.3
22	1.5	1.1	1.3	1.2	1.1	2.3	1.5	1.2	1.1	.90	.99	1.3
23	1.4	1.1	1.1	1.2	1.1	3.0	1.5	1.2	1.1	.90	.99	1.2
24	1.3	1.1	1.1	1.2	1.2	3.5	1.6	1.2	1.1	.90	1.1	1.3
25	1.3	1.1	1.1	1.2	1.3	2.8	1.6	1.2	1.1	.93	1.3	1.5
26	2.1	1.1	1.1	1.2	1.3	2.5	1.6	1.2	1.1	1.0	1.1	1.5
27	1.8	1.1	1.1	1.2	1.3	2.3	1.5	1.2	1.1	.93	1.0	1.4
28	1.6	1.1	1.1	1.2	1.3	2.1	1.6	1.2	1.1	.96	.99	1.5
29	1.5	1.4	1.1	1.2	---	2.0	1.5	1.2	1.1	.99	.96	1.3
30	1.4	1.3	1.1	1.1	---	1.9	1.6	1.2	1.1	1.1	.96	1.3
31	1.6	---	1.1	1.1	---	1.9	---	1.2	---	1.0	.96	---
TOTAL	40.2	37.8	38.5	42.1	31.6	51.9	56.2	41.4	37.3	30.85	33.84	38.32
MEAN	1.30	1.26	1.24	1.36	1.13	1.67	1.87	1.34	1.24	1.00	1.09	1.28
MAX	2.1	1.6	1.7	3.5	1.3	3.5	2.5	1.7	1.8	1.1	1.4	2.1
MIN	1.1	1.1	1.1	1.1	1.0	1.2	1.5	1.2	1.1	.90	.96	.90
CFSM	.56	.55	.54	.59	.49	.72	.81	.58	.54	.43	.47	.55
IN.	.65	.61	.62	.68	.51	.84	.90	.67	.60	.50	.54	.62

CAL YR 1976 TOTAL 767.30 MEAN 2.10 MAX 7.6 MIN 1.1 CFSM .91 IN 12.35
WTR YR 1977 TOTAL 480.01 MEAN 1.32 MAX 3.5 MIN .90 CFSM .57 IN 7.73

NOTE.--No gage-height record Dec. 12 to Feb. 23.

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM .7UM-MF (COL./100 ML)
OCT 14...	1415	1.1	--	--	--	--	--	--	--	--
NOV 17...	1330	1.3	42	4.4	7.0	1	4.5	3.6	B3	--
DEC 17...	1410	1.3	40	--	5.5	--	--	--	--	--
JAN 26...	1230	1.2	42	4.2	4.5	1	7.1	.4	42	<1
FEB 15...	1300	1.1	--	--	--	--	--	--	--	--
MAR 23...	1305	2.9	84	4.2	5.5	3	7.1	--	20	<1
APR 13...	1500	2.0	--	--	--	--	--	--	--	--
MAY 23...	0845	1.3	35	4.4	13.0	1	2.2	.3	200	<1
JUN 08...	1217	1.1	--	--	--	--	--	--	--	--
JUL 25...	1345	.90	27	4.2	7.5	1	2.4	1.1	B2100	B7
AUG 29...	1030	.90	34	--	16.5	--	--	--	--	--
SEP 20...	1400	1.1	56	3.6	16.7	0	3.6	.2	280	15

DATE	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ACIDITY AS H+ (MG/L)	TOTAL ACIDITY AS CACO3 (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT 14...	--	--	--	--	--	--	--	--	--	--
NOV 17...	21	7	6	--	--	2.1	.5	1.9	2.3	1
DEC 17...	--	--	--	--	--	--	--	--	--	--
JAN 26...	B13	3	3	.2	10	.6	.4	1.8	.4	0
FEB 15...	--	--	--	--	--	--	--	--	--	--
MAR 23...	25	11	11	.5	25	2.6	1.1	2.0	1.8	0
APR 13...	--	--	--	--	--	--	--	--	--	--
MAY 23...	B200	3	1	--	--	.6	.3	1.8	.3	2
JUN 08...	--	--	--	--	--	--	--	--	--	--
JUL 25...	140	3	3	--	--	.7	.4	2.1	.4	1
AUG 29...	--	--	--	--	--	--	--	--	--	--
SEP 20...	25	9	9	--	--	1.7	1.2	2.7	.6	0

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT 14...	--	--	--	--	--	--	--	--	--
NOV 17...	--	1	64	.0	5.1	4.6	.1	4.2	14
DEC 17...	--	--	--	--	--	--	--	--	--
JAN 26...	0	0	.0	--	6.0	3.3	.0	4.2	24
FEB 15...	--	--	--	--	--	--	--	--	--
MAR 23...	--	0	.0	--	14	3.2	.0	3.2	30
APR 13...	--	--	--	--	--	--	--	--	--
MAY 23...	--	2	127	.0	3.9	3.3	.0	3.6	16
JUN 08...	--	--	--	--	--	--	--	--	--
JUL 25...	--	1	101	--	4.5	4.1	.0	4.2	29
AUG 29...	--	--	--	--	--	--	--	--	--
SEP 20...	--	0	.0	--	13	3.7	.0	5.0	20

DATE	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 14...	--	--	--	--	--	--	--	--	--
NOV 17...	24	<1	.04	.01	.04	.05	.09	.00	4.2
DEC 17...	--	--	--	--	--	--	--	--	--
JAN 26...	--	0	.07	.01	.00	.01	.08	.00	1.0
FEB 15...	--	--	--	--	--	--	--	--	--
MAR 23...	--	4	.05	.00	.43	.43	.48	.00	5.1
APR 13...	--	--	--	--	--	--	--	--	--
MAY 23...	--	9	.02	.01	.07	.08	.10	.00	7.0
JUN 08...	--	--	--	--	--	--	--	--	--
JUL 25...	--	1	.01	.03	.17	.20	.21	.01	7.6
AUG 29...	--	--	--	--	--	--	--	--	--
SEP 20...	--	0	--	--	--	--	--	--	8.5

DATE	TIME	TOTAL ALUM-INUM (AL) (UG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV 17...	1330	90	90	1	0	20	0	40	0	0
MAY 23...	0845	110	100	2	0	20	0	<10	0	0

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV 17...	1	130	130	3	10	.2	1	0	0	20
MAY 23...	0	290	190	2	20	.0	2	0	0	20

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
NOV 17...	1330	1.5	<.4	1.3	<.4	1.1	<.4	.14	.04

DATE	TIME	CYANIDE (CN) (MG/L)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)
NOV 17...	1330	.00	.0	0	.00	.0	.0	8	.08	11
MAY 23...	0845	.00	--	--	--	--	--	--	--	--

DATE	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)
NOV 17...	.00	3.2	.00	3.3	.00	.00	.4	.00	.0
MAY 23...	--	--	--	--	--	--	--	--	--

DATE	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL MALA-THION (UG/L)	TOTAL METHYL PARA-THION (UG/L)
NOV 17...	.00	.00	.0	.00	.0	.00	.0	.00	.00
MAY 23...	--	--	--	--	--	--	--	--	--

DATE	TOTAL METHYL TRI-THION (UG/L)	POLY-CHLO-RINATED NAPH-THA-LENES (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV 17...	.00	.00	.00	0	0	.00	.00	.00	.00
MAY 23...	--	--	--	--	--	--	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
OCT					
14...	1415	1.1	--	3	.01
NOV					
17...	1330	1.3	7.0	1	.00
DEC					
17...	1410	1.3	5.5	1	.00
JAN					
26...	1230	1.2	4.5	1	.00
FEB					
15...	1300	1.1	--	1	.00
MAR					
23...	1305	2.9	5.5	2	.02
APR					
13...	1500	2.0	--	1	.01
MAY					
23...	0845	1.3	13.0	1	.00
JUN					
08...	1217	1.1	--	9	.03
JUL					
25...	1345	.90	7.5	4	.01
AUG					
29...	1030	.90	16.5	3	.01
SEP					
20...	1400	1.1	16.5	1	.00

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	34	33	33	60	57	59	41	40	40	38	36	37
2	33	33	33	57	55	56	41	39	40	38	37	37
3	33	33	33	55	53	54	40	39	40	37	37	37
4	33	32	33	53	50	52	40	39	40	37	36	37
5	33	33	33	52	49	51	39	39	39	37	36	36
6	33	33	33	50	48	49	39	39	39	36	32	34
7	33	31	32	48	47	48	54	39	48	36	32	33
8	32	32	32	47	46	46	57	52	56	35	33	34
9	37	31	33	45	44	45	57	56	56	34	32	32
10	39	37	38	44	43	44	56	54	56	51	32	44
11	37	34	35	43	42	43	54	52	53	53	51	52
12	33	31	31	43	41	42	53	47	50	54	53	54
13	31	31	31	42	41	41	53	47	52	54	52	53
14	31	31	31	41	40	40	52	51	51	52	48	51
15	31	31	31	40	40	40	51	49	50	49	48	49
16	31	31	31	40	39	40	49	47	48	49	46	47
17	31	31	31	39	38	39	46	42	45	47	45	46
18	31	30	31	39	38	39	44	43	44	45	44	45
19	30	30	30	39	39	39	43	41	42	44	44	44
20	56	30	35	39	39	39	41	36	39	44	43	44
21	61	56	59	39	39	39	44	37	42	44	43	43
22	58	56	57	39	39	39	42	42	42	43	42	42
23	56	54	55	39	39	39	42	41	42	42	42	42
24	54	46	51	39	39	39	42	41	42	42	40	41
25	48	45	46	39	37	39	41	39	41	41	39	40
26	72	45	64	39	37	38	40	38	39	41	41	41
27	71	69	70	37	34	34	40	39	40	41	40	41
28	69	65	67	34	34	34	39	37	38	40	39	40
29	64	60	62	42	34	39	39	37	38	40	39	40
30	60	55	58	42	41	41	38	37	38	40	39	39
31	59	51	54	---	---	---	38	37	38	39	39	39
MONTH	72	30	42	60	34	43	57	36	44	54	32	42

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	39	39	39	85	79	82	67	64	65	49	47	48
2	39	39	39	79	75	77	64	60	63	47	45	46
3	39	39	39	74	70	72	67	58	62	45	44	44
4	39	37	39	70	64	66	68	63	66	45	42	43
5	39	37	38	70	64	67	69	62	65	42	39	41
6	38	37	37	70	67	69	76	70	72	44	36	41
7	37	37	37	67	65	66	79	75	78	45	43	45
8	37	37	37	64	62	63	78	75	76	45	44	45
9	37	36	37	61	59	60	75	71	73	45	44	44
10	37	36	37	59	57	58	71	67	69	44	43	43
11	37	36	---	57	54	55	69	64	66	43	41	42
12	---	---	---	54	51	52	65	60	63	41	36	40
13	---	---	---	54	49	50	61	58	60	40	34	37
14	---	---	---	60	55	58	59	57	58	40	34	36
15	39	38	---	59	57	58	59	55	57	40	34	36
16	39	38	39	57	55	56	57	53	55	36	34	34
17	39	39	39	55	52	54	55	52	53	35	34	35
18	39	38	39	61	51	56	54	49	51	35	35	35
19	38	35	37	61	59	60	51	48	49	35	35	35
20	38	35	36	61	58	59	50	47	48	35	34	34
21	38	36	37	64	60	62	49	47	47	34	33	34
22	36	36	36	83	55	67	47	44	45	34	31	---
23	36	34	35	103	84	92	46	44	45	---	---	---
24	68	29	38	103	98	101	47	44	45	---	---	---
25	81	68	75	98	89	93	48	46	47	---	---	---
26	89	76	81	92	82	87	48	46	47	---	---	---
27	90	85	88	83	76	80	49	46	47	---	---	---
28	91	85	88	78	67	73	49	47	48	---	---	---
29	---	---	---	69	60	66	51	48	50	---	---	---
30	---	---	---	67	63	65	50	47	49	---	---	---
31	---	---	---	66	61	65	---	---	---	---	---	---
MONTH	91	29	46	103	49	67	79	44	57	---	---	---

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	33	32	33	47	44	45	33	25	27
2	---	---	---	32	32	33	45	39	42	33	24	28
3	---	---	---	33	31	32	45	39	43	32	25	26
4	---	---	---	33	30	32	46	44	45	31	24	26
5	---	---	---	33	31	33	---	---	---	48	22	36
6	---	---	---	34	31	34	---	---	---	48	41	46
7	---	---	---	34	32	34	---	---	---	50	47	47
8	---	---	---	35	30	33	---	---	---	54	49	52
9	---	---	---	35	34	34	---	---	---	55	49	53
10	61	60	---	36	35	35	---	---	---	49	44	46
11	59	58	59	36	35	35	---	---	---	49	48	49
12	58	56	57	36	31	34	---	---	---	47	43	45
13	56	55	55	37	34	35	---	---	---	44	39	42
14	56	55	56	39	37	38	---	---	---	41	38	39
15	55	55	55	39	39	39	---	---	---	39	36	38
16	55	54	54	39	38	39	---	---	---	37	34	36
17	54	52	53	39	38	38	---	---	---	54	37	52
18	53	51	52	39	38	38	48	40	---	60	53	56
19	51	49	50	39	37	38	42	38	40	60	58	59
20	50	46	48	40	37	39	42	37	40	59	56	58
21	46	45	46	40	37	39	42	40	41	61	57	60
22	45	44	45	40	38	39	41	33	36	60	56	58
23	45	43	44	40	37	38	39	34	38	59	54	56
24	44	43	43	40	37	39	39	31	36	57	50	53
25	45	43	44	41	37	39	42	39	41	57	53	55
26	45	43	44	43	41	42	40	38	39	59	39	47
27	44	43	44	45	40	43	39	37	38	61	43	---
28	45	41	43	46	41	44	37	29	35	---	---	---
29	45	43	44	48	41	44	36	31	34	---	---	---
30	44	43	43	46	44	45	36	27	33	---	---	---
31	---	---	---	46	44	46	35	27	31	---	---	---
MONTH	---	---	---	48	30	38	---	---	---	61	22	46
YEAR	103	22	46									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	12.5	13.0	9.0	8.5	9.0	6.5	6.0	6.0	4.0	4.0	4.0
2	13.0	12.5	12.5	8.5	8.0	8.5	6.5	6.0	6.0	4.5	4.0	4.5
3	13.0	13.0	13.0	9.0	8.0	8.5	5.5	5.0	5.5	4.5	4.0	4.5
4	13.5	12.5	13.0	9.0	8.5	9.0	5.5	4.5	5.0	5.0	4.5	5.0
5	13.5	13.0	13.0	9.0	8.5	9.0	5.5	4.5	5.0	5.0	4.0	4.5
6	14.0	13.5	13.5	9.0	8.5	8.5	5.5	4.5	5.0	4.5	4.0	4.5
7	14.5	13.5	13.5	9.0	8.5	8.5	6.0	4.5	5.0	5.0	4.0	4.5
8	14.5	13.5	14.0	8.5	8.0	8.0	4.5	4.0	4.5	4.5	3.5	4.0
9	14.5	13.5	14.0	8.0	7.5	7.5	4.0	3.5	4.0	4.5	3.5	4.0
10	13.5	12.5	13.0	8.0	7.5	7.5	4.5	4.0	4.0	4.5	3.0	3.5
11	13.0	11.5	12.0	8.0	7.5	7.5	5.0	4.5	4.5	3.0	3.0	3.0
12	12.5	11.0	11.5	7.5	7.0	7.5	5.5	5.0	5.0	3.0	2.5	3.0
13	12.5	10.5	11.5	7.5	7.0	7.0	5.0	4.5	5.0	2.5	2.5	2.5
14	12.0	10.5	11.5	7.5	7.0	7.0	4.5	4.0	4.5	3.0	2.5	3.0
15	12.0	10.5	11.0	7.5	6.5	7.0	5.0	4.5	5.0	3.5	3.0	3.0
16	12.0	11.0	11.5	7.0	6.5	7.0	5.5	5.0	5.0	3.0	2.5	3.0
17	11.0	10.5	10.5	7.0	6.0	6.5	5.5	5.0	5.0	2.5	2.0	2.5
18	10.5	9.5	10.0	7.0	6.5	7.0	5.5	5.0	5.5	2.5	2.0	2.5
19	10.5	8.5	9.5	7.5	6.5	7.0	5.5	5.0	5.0	3.0	2.5	3.0
20	11.5	9.5	10.5	7.5	7.0	7.0	6.0	5.5	5.5	3.5	3.0	3.5
21	11.5	10.5	11.0	7.0	6.5	7.0	5.5	5.0	5.0	4.0	3.5	3.5
22	10.5	9.5	10.0	7.0	6.5	6.5	5.0	4.5	4.5	3.5	3.5	3.5
23	10.0	9.5	9.5	7.0	6.5	6.5	5.5	4.5	5.0	4.0	3.5	3.5
24	10.0	9.5	9.5	6.5	6.0	6.5	5.0	4.5	4.5	4.0	3.5	4.0
25	10.5	10.0	10.0	6.5	6.5	6.5	5.0	4.5	4.5	4.5	4.0	4.5
26	11.0	10.0	10.5	7.5	6.5	7.0	5.0	5.0	5.0	4.5	4.0	4.0
27	9.5	9.0	9.5	8.0	7.5	8.0	5.0	4.5	4.5	4.5	4.0	4.0
28	9.0	8.0	8.5	8.5	7.5	8.0	5.0	4.5	4.5	4.5	3.5	4.0
29	8.5	8.0	8.0	8.5	7.5	8.0	5.0	4.5	4.5	3.5	3.0	3.5
30	8.5	7.5	8.0	7.5	6.5	7.0	4.5	4.0	4.5	3.5	3.0	3.5
31	9.5	8.5	9.0	---	---	---	4.5	4.0	4.5	3.5	3.0	3.5
MONTH	14.5	7.5	11.0	9.0	6.0	7.5	6.5	3.5	5.0	5.0	2.0	3.5

01466500 MC DONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.0	3.5	3.5	3.0	2.5	2.5	10.0	9.0	9.5	13.5	12.0	12.5
2	4.0	3.5	4.0	3.0	2.5	3.0	9.0	8.5	9.0	13.5	12.5	13.5
3	4.5	3.5	4.0	3.5	2.5	3.0	10.5	9.0	10.0	14.5	13.5	14.0
4	5.0	4.5	4.5	4.5	3.5	4.0	9.5	9.5	9.5	13.5	13.0	13.5
5	4.5	3.5	4.5	5.5	4.5	5.0	9.5	9.0	9.0	14.0	13.5	13.5
6	4.0	3.5	3.5	5.5	5.0	5.0	9.0	8.5	9.0	15.5	14.0	14.5
7	4.0	3.5	3.5	5.5	5.0	5.0	8.5	8.0	8.0	15.0	14.5	15.0
8	4.0	3.5	3.5	5.5	5.0	5.0	8.5	7.5	8.0	15.5	14.5	14.5
9	4.0	3.0	4.0	6.0	5.0	5.5	8.0	7.0	7.5	14.5	13.5	14.0
10	4.5	4.0	4.5	6.5	5.5	6.0	8.0	6.5	7.0	14.0	13.5	13.5
11	5.0	4.0	---	7.0	6.0	6.5	8.5	7.0	8.0	14.5	13.5	13.5
12	---	---	---	7.5	6.5	7.0	10.0	8.0	9.0	14.5	13.0	14.0
13	---	---	---	8.0	7.5	8.0	11.0	9.5	10.0	15.5	14.0	14.5
14	---	---	---	8.5	8.0	8.5	11.5	10.5	11.0	15.0	14.0	14.5
15	5.0	4.5	---	9.0	8.0	8.5	11.5	10.5	11.0	15.0	13.5	14.5
16	4.5	4.0	4.5	9.0	8.0	8.5	11.5	10.5	11.0	15.5	14.0	14.5
17	4.0	3.5	4.0	8.5	7.5	8.0	11.5	10.0	10.5	16.0	14.5	15.0
18	4.0	3.0	3.5	7.5	7.5	7.5	11.5	10.0	11.0	16.5	15.0	15.5
19	4.5	4.0	4.5	7.5	6.5	7.0	12.0	11.0	11.5	16.0	15.5	16.0
20	4.5	4.5	4.5	6.5	6.5	6.5	12.5	11.0	11.5	16.5	15.5	16.0
21	4.5	4.0	4.0	7.5	6.5	7.0	12.5	11.5	12.0	16.5	15.5	16.0
22	4.5	3.5	4.0	7.0	6.0	7.0	13.5	12.0	12.5	16.5	15.5	16.0
23	5.5	4.5	5.0	6.0	5.0	5.5	14.0	13.0	13.5	16.5	15.0	15.5
24	5.5	3.5	5.0	5.0	4.0	4.5	13.5	13.0	13.5	16.0	15.5	15.5
25	4.0	3.0	3.5	4.5	4.0	4.0	13.5	12.5	13.0	15.5	14.5	15.0
26	3.5	2.5	3.0	5.0	3.5	4.5	13.0	12.5	12.5	15.5	14.0	14.5
27	3.5	2.0	2.5	5.5	4.5	5.0	13.0	12.5	12.5	14.5	13.5	---
28	3.0	2.5	3.0	6.5	5.5	6.0	13.0	12.5	13.0	---	---	---
29	---	---	---	8.0	6.5	7.5	13.0	12.0	12.5	---	---	---
30	---	---	---	9.5	8.0	9.0	13.0	11.5	12.5	---	---	---
31	---	---	---	10.0	9.0	9.5	---	---	---	---	---	---
MONTH	5.5	2.0	4.0	10.0	2.5	6.0	14.0	6.5	10.5	16.5	12.0	14.5

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	16.0	15.5	16.0	18.0	16.5	17.0	18.5	16.5	17.5
2	---	---	---	16.5	15.5	16.0	17.5	16.5	16.5	19.0	17.0	18.0
3	---	---	---	16.0	15.0	15.5	17.0	16.5	16.5	19.0	17.5	18.0
4	---	---	---	16.0	15.5	15.5	18.0	16.5	17.0	18.5	17.0	17.5
5	---	---	---	16.5	15.5	16.0	---	---	---	18.0	17.0	17.5
6	---	---	---	16.5	16.0	16.0	---	---	---	17.5	17.0	17.5
7	---	---	---	16.0	16.0	16.0	---	---	---	18.0	17.0	17.5
8	13.5	13.5	---	16.5	16.0	16.0	---	---	---	17.0	16.5	16.5
9	13.5	13.5	13.5	16.5	16.0	16.5	---	---	---	16.5	16.0	16.5
10	14.0	13.0	13.5	17.0	16.0	16.5	---	---	---	17.0	16.5	16.5
11	14.5	13.5	14.0	16.5	16.0	16.0	---	---	---	17.0	15.5	16.0
12	14.5	14.0	14.0	17.0	16.0	16.5	---	---	---	16.5	14.0	15.0
13	15.0	14.0	14.5	17.5	16.5	16.5	---	---	---	16.5	15.0	15.5
14	15.0	14.0	14.5	18.0	16.5	17.0	---	---	---	16.5	15.5	16.0
15	15.0	14.5	14.5	18.0	16.5	17.0	---	---	---	16.0	14.5	15.5
16	15.0	14.5	15.0	18.0	16.5	17.0	---	---	---	16.0	15.5	15.5
17	15.5	15.0	15.0	18.5	17.0	17.5	---	---	---	16.5	15.5	16.0
18	16.0	15.0	15.5	18.5	17.5	18.0	18.0	16.5	---	16.5	16.0	16.5
19	16.0	15.0	15.5	19.0	17.0	18.0	17.0	15.5	16.5	17.0	16.5	16.5
20	16.0	15.0	15.5	18.5	17.5	18.0	17.5	16.0	16.5	17.0	16.5	16.5
21	15.5	14.5	15.0	19.0	17.5	18.5	17.0	15.0	16.0	16.5	16.0	16.0
22	15.5	14.5	15.0	19.0	18.0	18.5	17.5	16.0	16.5	16.0	15.5	16.0
23	15.5	14.5	15.0	18.0	16.5	17.5	17.0	16.0	16.5	15.5	15.5	15.5
24	15.0	15.0	15.0	18.5	17.0	17.5	16.5	16.0	16.5	15.5	15.5	15.5
25	16.0	15.0	15.5	18.0	17.0	17.5	17.0	15.5	16.0	15.5	15.0	15.0
26	16.0	15.0	15.5	18.0	16.5	17.0	16.5	14.0	15.5	15.5	15.0	15.0
27	16.0	15.0	15.5	17.5	16.0	16.5	16.5	15.0	16.0	15.5	15.0	---
28	16.5	15.5	16.0	17.5	15.5	16.5	17.0	16.0	16.5	---	---	---
29	16.5	15.5	16.0	17.5	15.5	16.0	17.5	16.0	17.0	---	---	---
30	16.5	15.5	16.0	16.5	16.0	16.5	18.5	16.5	17.0	---	---	---
31	---	---	---	17.5	15.5	16.5	18.0	16.5	17.0	---	---	---
MONTH	---	---	---	19.0	15.0	17.0	---	---	---	19.0	14.0	16.5
YEAR	19.0	2.0	10.0									

01466800 BISPHAMS MILL CREEK NEAR PRESIDENTIAL LAKES, NJ

LOCATION.--Lat 39°55'25", long 74°35'31", Burlington County, Hydrologic Unit 02040202, at bridge on unnamed road, approximately 1.2 mi (1.9 km) northwest of Presidential Lakes, 1.8 mi (2.9 km) south of Browns Mills Junction, and 1.9 mi (3.1 km) northeast of Ong.

DRAINAGE AREA.--13.7 mi² (35.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: June to September 1977.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI (MPN)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
JUN 01...	1125	37	4.6	19.0	4	7.4	.7	<2	240	0	0	0
27...	0915	37	5.7	20.0	3	6.9	.9	22	140	4	0	3
JUL 28...	0915	39	4.6	19.0	4	7.6	.7	49	49	1	0	1
AUG 22...	0920	40	4.8	20.0	2	7.4	.7	100	240	0	0	0
SEP 28...	0915	46	4.5	16.0	1	7.9	.5	170	350	0	0	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)
JUN 01...	24	20	3	.06	.00	.03	.18	.21	.27	7.1	.00
27...	13	30	6	.07	.00	.05	.46	.51	.58	5.3	.00
JUL 28...	40	30	1	.05	.00	.04	.46	.50	.55	4.9	.00
AUG 22...	.0	28	5	.08	.00	.03	.24	.27	.35	4.7	.00
SEP 28...	.0	24	0	.15	.00	.05	.14	.19	.34	7.5	.00

DATE	TIME	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
JUN 27...	0915	0	<10	0	3	1900	3	20	6	20

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

LOCATION.--Lat 39°57'23", long 74°37'39", Burlington County, Hydrologic Unit 02040202, at bridge on Springfield Road, 0.1 mi (0.2 km) south of intersection of Springfield Road and Penn Central Railroad, and 1.8 mi (2.9 km) northeast of Magnolia.

DRAINAGE AREA.--80.7 mi² (209.0 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1953, 1957-58, 1966, 1968-69, 1972, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV 16...	1100	51	4.2	4.0	2	12.0	.7	140	2	84	<2	10
FEB 15...	1150	48	4.1	3.0	3	12.2	1.5	84	<2	84	4	7
MAR 24...	1000	54	4.4	5.5	3	11.0	1.2	12	4	53	12	11
MAY 12...	0905	44	4.5	11.5	3	9.7	.8	87	33	210	14	7
JUN 20...	0835	40	4.5	20.5	4	7.7	2.1	36	22	B1400	23	5
JUL 18...	0935	42	4.6	24.0	4	6.8	1.0	--	49	--	110	7
AUG 17...	1055	54	4.2	23.0	5	7.4	1.0	--	79	--	23	13

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV 16...	10	2.4	1.0	2.6	.7	0	0	0	.0	--	9.4	4.2
FEB 15...	7	1.5	.7	2.9	.9	0	0	0	.0	--	9.2	4.5
MAR 24...	11	3.0	.9	2.5	.8	0	0	0	.0	--	11	4.0
MAY 12...	7	2.1	.5	2.4	.7	0	0	0	.0	.0	6.6	4.0
JUN 20...	5	1.1	.6	2.5	.7	0	0	0	.0	--	6.0	4.1
JUL 18...	7	2.0	.6	2.5	.8	0	0	0	.0	--	5.4	4.0
AUG 17...	13	4.0	.7	2.8	.7	0	0	0	.0	--	7.7	4.3

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	--	34	9	--	--	--	--	1.4	--	.00	--	2.4
FEB 15...	--	42	9	--	--	--	--	1.4	--	.02	--	7.6
MAR 24...	--	36	7	--	--	--	--	1.4	--	.01	--	--
MAY 12...	4.3	26	6	--	--	--	--	1.3	--	.02	--	5.7
JUN 20...	--	24	8	--	--	--	--	1.1	--	.02	--	5.8
JUL 18...	--	29	4	.06	.00	.08	.00	.08	.14	.02	.01	7.8
AUG 17...	--	30	5	.06	.00	.05	.40	.45	.51	.08	.03	11

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 12...	0905	220	0	0	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 12...	530	2	40	.0	0	0	110	0

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ

LOCATION.--Lat 39°58'10", long 74°41'05", Burlington County, Hydrologic Unit 02040202, on right bank at downstream side of highway bridge at Pemberton, 12 mi (19 km) upstream from confluence with South Branch.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: September 1921 to current year.
CHEMICAL ANALYSES: Water years 1923-24, 1958, 1962-69, 1975 to current year.

REVISED DISCHARGE RECORDS.--WSP 1302: 1922-23. WSP 1382: 1933.

GAGE.--Water-stage recorder above concrete dams. Datum of gage is 31.19 ft (9.507 m) NGVD. Prior to June 9, 1923, nonrecording gage and June 9, 1923 to Aug. 9, 1951, water-stage recorder at site 600 ft (183 m) downstream at datum 6.54 ft (1.993 m) lower.

REMARKS.--Discharge records excellent. Flow regulated occasionally by operation of gate in dam and by ponds above station.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--56 years, 169 ft³/s (4.786 m³/s), 20.68 in/yr (525 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 408 ft³/s (11.6 m³/s) Feb. 26, gage height, 2.18 ft (0.664 m), no peak above base of 600 ft³/s (17.0 m³/s); minimum, 31 ft³/s (0.99 m³/s) July 24, 25.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft³/s (49.0 m³/s) Aug. 31, 1939, gage height, 4.23 ft (1.289 m), from high-water mark at former site, present datum; minimum daily, 9.0 ft³/s (0.25 m³/s) Sept. 29, 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	170	94	94	87	176	146	126	58	55	41	106
2	68	158	84	90	100	170	182	126	61	55	61	106
3	64	138	80	87	92	162	218	126	61	52	61	94
4	61	134	80	87	88	170	122	118	61	52	84	84
5	55	138	77	84	92	194	251	134	58	52	84	77
6	55	118	77	84	86	150	300	146	61	55	80	90
7	52	106	134	87	86	142	218	150	68	58	77	134
8	50	102	188	87	87	130	212	138	68	64	68	146
9	87	110	176	84	94	126	188	114	87	61	64	130
10	84	126	150	150	92	118	170	98	118	55	61	106
11	44	110	130	212	150	114	158	90	114	50	71	94
12	52	94	122	176	290	114	146	90	98	58	74	80
13	44	90	118	162	325	122	138	94	84	71	71	71
14	47	90	110	162	224	138	134	87	77	68	118	61
15	50	90	98	142	130	138	138	84	98	52	182	58
16	52	87	90	134	130	150	122	80	98	47	142	58
17	58	87	90	118	118	237	114	77	80	44	106	64
18	64	87	98	134	106	293	118	87	84	41	138	87
19	55	87	102	158	102	200	118	114	74	41	122	98
20	68	94	102	146	102	162	114	98	64	38	98	150
21	146	102	118	118	106	158	114	94	64	38	84	154
22	146	90	114	110	106	224	122	77	58	36	80	154
23	138	90	106	106	106	279	122	74	58	33	80	130
24	126	94	102	98	138	258	110	77	58	33	84	134
25	118	87	98	98	351	212	126	80	58	33	134	166
26	166	84	102	94	370	182	126	84	61	38	126	272
27	176	84	106	94	351	194	130	77	61	44	110	166
28	166	87	102	94	224	182	126	71	58	38	94	130
29	146	94	102	94	---	170	138	64	64	36	84	134
30	134	102	102	90	---	162	130	64	61	36	77	126
31	162	---	98	87	---	154	---	61	---	41	80	---
TOTAL	2802	3130	3350	3561	4333	5381	4551	3000	2173	1475	2836	3460
MEAN	90.4	104	108	115	155	174	152	96.8	72.4	47.6	91.5	115
MAX	176	170	188	212	370	293	300	150	118	71	182	272
MIN	44	84	77	84	86	114	110	61	58	33	41	58
CFSM	.81	.94	.97	1.04	1.40	1.57	1.37	.87	.65	.43	.82	1.04
IN.	.94	1.05	1.12	1.19	1.45	1.80	1.53	1.01	.73	.49	.95	1.16

CAL YR 1976 TOTAL 52060 MEAN 142 MAX 635 MIN 44 CFSM 1.28 IN 17.45
WTR YR 1977 TOTAL 40052 MEAN 110 MAX 370 MIN 33 CFSM .99 IN 13.42

01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
NOV 16...	1000	98	56	4.5	4.0	2	11.8	.8	120	2	240	70
FEB 15...	1100	142	62	4.5	3.0	3	12.0	1.1	88	4	40	12
MAR 24...	1055	265	62	4.3	6.0	3	10.8	1.3	812	<2	848	27
APR 14...	1245	134	--	--	--	--	--	--	--	--	--	--
MAY 12...	1035	86	50	6.4	13.5	4	9.0	1.0	56	49	8300	330
JUN 20...	0920	64	45	4.8	22.0	6	6.8	1.6	883	33	2000	33
JUL 18...	1030	42	44	5.2	25.5	3	5.4	1.5	--	920	--	49
AUG 17...	1020	98	58	4.5	24.0	5	6.2	1.3	--	540	--	5

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	11	11	2.4	1.2	2.9	1.0	0	0	0	.0	12	4.8
FEB 15...	10	10	2.4	1.0	3.5	1.1	0	0	0	.0	12	5.6
MAR 24...	12	12	3.0	1.1	2.6	1.0	0	0	0	.0	12	4.3
APR 14...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 12...	9	5	2.2	.9	2.9	1.0	5	0	4	3.2	8.9	4.8
JUN 20...	8	7	1.8	.8	3.1	.9	1	0	1	25	7.2	5.2
JUL 18...	9	7	2.1	.9	3.0	.9	2	0	2	20	6.6	4.6
AUG 17...	15	15	4.0	1.1	3.0	.9	0	0	0	.0	11	4.5

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	25	3	--	--	--	--	1.4	--	.02	--	3.6
FEB 15...	46	8	--	--	--	--	1.4	--	.03	--	7.2
MAR 24...	38	7	--	--	--	--	1.7	--	.02	--	--
APR 14...	--	--	--	--	--	--	--	--	--	--	--
MAY 12...	37	2	--	--	--	--	1.1	--	.04	--	6.2
JUN 20...	32	0	--	--	--	--	1.1	--	.02	--	6.0
JUL 18...	28	4	.06	.00	.10	.42	.52	.58	.08	.04	8.2
AUG 17...	38	20	.06	.00	.05	.51	.56	.62	.06	.00	9.2

01467003 NORTH BRANCH RANCOCAS CREEK AT EWANVILLE, NJ

LOCATION.--Lat 39°58'55", long 74°44'11", Burlington County, Hydrologic Unit 02040202, at bridge on U.S. Route 206, 0.2 mi (0.3 km) upstream from confluence with Powells Run, 0.7 mi (1.1 km) east of Smithville, and 0.8 mi (1.3 km) north of intersection of U.S. Route 206 with State Route 38.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	0830	128	4.2	3.5	2	11.6	2.0	140	4	B40	20	23
FEB 16...	1200	83	5.8	2.0	4	12.7	1.7	B20	<2	B26	33	18
MAR 24...	1255	71	5.0	6.5	4	11.4	1.4	B5	17	B166	27	21
MAY 19...	1335	68	6.3	19.0	5	8.0	1.4	1000	920	1500	1600	19
JUN 20...	1010	107	6.6	22.0	7	6.3	4.5	1900	130	2900	280	17
JUL 18...	1200	156	6.6	26.0	3	3.7	3.2	--	130	--	1600	21
AUG 17...	0940	105	5.9	23.5	4	6.4	2.1	--	540	--	6	20

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	23	6.1	2.0	8.5	1.5	0	0	0	.0	--	33	7.5
FEB 16...	15	4.9	1.4	5.5	1.5	4	0	3	10	--	18	8.1
MAR 24...	19	6.0	1.5	3.6	1.3	2	0	2	32	--	16	5.5
MAY 19...	14	4.7	1.7	4.3	1.3	6	0	5	4.8	.0	13	6.1
JUN 20...	8	4.8	1.2	12	1.6	11	0	9	4.4	--	18	11
JUL 18...	7	5.9	1.4	17	1.9	17	0	14	6.8	--	28	14
AUG 17...	15	5.6	1.4	9.0	1.5	6	0	5	12	--	20	9.8

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	--	109	0	--	--	--	--	1.2	--	.15	--	11
FEB 16...	--	57	5	--	--	--	--	1.4	--	.07	--	5.0
MAR 24...	--	52	6	--	--	--	--	1.7	--	.05	--	--
MAY 19...	4.3	48	7	--	--	--	--	1.4	--	.10	--	7.1
JUN 20...	--	58	0	--	--	--	--	1.4	--	.07	--	7.5
JUL 18...	--	78	0	.12	.01	.78	.42	1.2	1.3	.27	.15	7.0
AUG 17...	--	62	4	.21	.01	.15	.63	.78	1.0	.14	.01	8.6

01467003 NORTH BRANCH RANCOCAS CREEK AT EWANVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 19...	1335	30	1	30	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 19...	90	10	40	.0	7	0	40	2

01467006 NORTH BRANCH RANCOCAS CREEK AT PINE STREET AT MOUNT HOLLY, NJ

LOCATION.--Lat 39°59'22", long 74°47'06", Burlington County, Hydrologic Unit 02040202, at bridge on Pine Street, 0.3 mi (0.5 km) downstream from Mill Dam, and 0.1 mi (0.2 km) north of Saint Andrews Cemetery in Mount Holly.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	1015	86	5.9	5.0	3	11.8	1.6	820	<20	856	80	19
FEB 01...	1100	122	6.0	.0	4	14.2	--	58	2	817	23	22
MAR 30...	1005	93	6.3	12.0	4	10.3	3.7	813	4	120	17	21
MAY 19...	0830	82	6.5	19.0	4	8.1	1.4	560	230	1400	790	24
JUN 16...	1015	91	6.6	20.0	4	8.1	1.4	1100	33	2000	80	23
JUL 20...	1140	169	6.8	27.0	5	6.1	2.0	--	49	--	4	32
AUG 16...	1015	100	5.8	23.0	7	7.9	1.6	--	130	--	79	22

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	16	5.4	1.4	5.4	1.6	4	0	3	8.1	18	7.9
FEB 01...	16	6.1	1.6	10	1.8	7	0	6	11	21	13
MAR 30...	17	5.7	1.6	7.8	1.4	5	0	4	4.0	19	9.6
MAY 19...	18	5.5	2.6	5.2	1.5	7	0	6	3.5	14	7.1
JUN 16...	16	6.8	1.4	6.2	1.6	9	0	7	3.6	18	7.7
JUL 20...	15	10	1.7	18	2.2	21	0	17	5.3	30	14
AUG 16...	18	6.2	1.6	6.6	1.6	5	0	4	13	22	7.4

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	60	7	--	--	--	--	1.1	--	.09	--	4.0
FEB 01...	72	5	--	--	--	--	1.4	--	.07	--	5.2
MAR 30...	64	0	--	--	--	--	1.7	--	.06	--	--
MAY 19...	54	4	--	--	--	--	1.4	--	.07	--	5.0
JUN 16...	62	52	--	--	--	--	1.1	--	.23	--	7.1
JUL 20...	91	11	.17	.01	.89	.71	1.6	1.8	.29	.21	5.1
AUG 16...	71	23	.18	.01	.18	.46	.64	.83	.17	.08	6.1

01467008 RANCOCAS CREEK AT CENTERTON, NJ

LOCATION.--Lat 39°59'47", long 74°52'05", Burlington County, Hydrologic Unit 02040202, at bridge on Interstate Route 295, 0.4 mi (0.6 km) downstream from confluence of North and South Branch Rancocas Creek.

DRAINAGE AREA.--312 mi² (808 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	0830	131	6.2	5.0	9	10.9	2.3	8200	2400	250	330	32
FEB 16...	0810	119	6.5	1.0	4	11.6	2.5	80	<2	82	33	29
MAR 30...	0740	103	6.5	13.0	5	8.5	3.3	110	110	250	130	28
MAY 18...	0745	133	6.7	20.0	9	7.7	3.8	280	350	580	80	32
JUN 16...	0800	137	6.7	21.5	2	7.5	4.1	1000	33	815000	140	34
JUL 20...	0940	179	7.2	29.0	2	6.5	4.8	--	540	--	11	45
AUG 16...	0855	139	6.1	23.5	5	4.6	3.6	--	1600	--	350	39

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	24	9.0	2.3	7.9	2.6	10	0	8	10	26	10
FEB 16...	19	8.2	2.1	6.9	2.5	12	0	10	6.1	24	10
MAR 30...	21	7.6	2.2	6.5	2.0	9	0	7	4.6	21	8.0
MAY 18...	20	8.7	2.4	8.8	2.4	15	0	12	4.8	23	12
JUN 16...	21	10	2.3	9.5	2.3	16	0	13	5.1	24	11
JUL 20...	19	12	3.6	12	2.5	32	0	26	3.2	25	15
AUG 16...	27	11	2.7	6.6	3.5	15	0	12	19	28	9.1

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	97	34	--	--	--	--	1.4	--	.16	--	4.8
FEB 16...	75	8	--	--	--	--	1.8	--	.14	--	5.6
MAR 30...	72	5	--	--	.12	.40	.52	.55	.14	--	--
MAY 18...	75	29	--	--	--	--	1.7	--	.08	--	7.3
JUN 16...	81	17	--	--	--	--	1.4	--	.29	--	4.8
JUL 20...	89	19	.48	.00	.19	.81	1.0	1.5	.28	.10	5.3
AUG 16...	86	62	.38	.01	.17	.83	1.0	1.4	.31	.07	6.3

01467019 MILL CREEK NEAR WILLINGBORO, NJ

LOCATION.--Lat 40°01'53", long 74°51'14", Burlington County, Hydrologic Unit 02040202, on left upstream wingwall of bridge on Springside Avenue, 2.2 mi (3.5 km) upstream from South Branch Mill Creek, 0.2 mi (0.3 km) east of Willingboro, and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA.--4.12 mi^2 (10.7 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1975 to current year.
CHEMICAL ANALYSES: Water year 1976 to current year.
SEDIMENT ANALYSES: Water year 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 34 ft (10.34 m), from topographic map.

REMARKS.--Discharge records good. Site was sampled as part of an urban runoff project.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 125 ft^3/s (3.54 m^3/s), revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 5	Unknown	150	4.25	Unknown	
Mar. 22	1720	162	4.59	7.23	2.204
Aug. 4	2015	145	4.11	7.02	2.140
Aug. 14	1530	*248	7.02	7.99	2.435
Aug. 24	2015	195	5.52	7.60	2.316

Minimum daily discharge, 0.18 ft^3/s (0.005 m^3/s) July 28, 29.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 248 ft^3/s (7.02 m^3/s) Aug. 14, 1977, gage height, 7.99 ft (2.435 m); minimum daily, 0.18 ft^3/s (0.005 m^3/s) July 28, 29, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.8	1.4	1.2	1.5	3.0	2.0	1.8	.60	.26	39	2.9
2	.75	1.8	1.2	1.3	1.4	2.6	5.4	1.6	.60	.23	17	1.3
3	2.1	1.7	1.3	1.3	1.3	2.4	4.9	1.5	.56	.23	37	1.1
4	1.3	1.6	1.1	1.3	1.3	3.6	3.9	1.7	.52	.20	6.9	.97
5	.66	1.5	.97	1.3	1.3	5.4	33	3.9	.56	.23	.89	2.2
6	.63	1.5	.97	1.4	1.2	2.7	5.6	2.3	.84	.26	16	24
7	.60	1.5	20	1.4	1.2	2.2	3.2	1.6	.56	.56	7.0	14
8	.66	1.4	7.6	1.4	1.3	2.0	2.8	1.3	.46	.64	.89	2.2
9	18	1.4	3.0	6.0	1.4	1.8	2.4	1.5	6.3	.30	.54	1.7
10	3.2	1.5	2.3	25	1.4	1.7	2.3	1.4	1.6	.23	.69	1.8
11	1.2	1.5	2.0	9.2	5.8	1.6	2.1	1.2	.72	.20	1.8	1.4
12	.89	1.4	1.9	3.2	28	1.6	1.8	1.0	.56	33	1.3	1.2
13	.80	1.5	1.8	2.4	9.8	2.5	1.7	1.0	.49	5.8	1.4	1.1
14	.75	1.5	1.6	2.3	4.8	5.8	1.6	.88	.46	.51	94	1.1
15	.80	1.4	1.5	2.3	3.2	2.7	1.5	.80	1.4	.33	12	1.1
16	.80	1.4	1.6	2.1	2.6	2.2	1.4	.72	.56	.27	1.9	1.1
17	.80	1.4	1.6	1.9	2.4	2.0	1.4	.72	.46	.24	2.3	1.6
18	1.0	1.5	1.4	1.8	2.0	16	1.4	.72	.42	.24	1.9	1.2
19	.97	1.4	1.2	1.7	1.8	5.2	1.3	.92	.36	.22	1.1	1.5
20	8.1	1.4	1.6	1.7	1.9	3.4	1.2	.68	.36	.22	.84	26
21	15	1.3	3.1	1.6	2.0	3.2	1.2	.60	.39	.24	.72	2.8
22	1.8	1.3	1.8	1.5	1.8	55	1.2	.60	.30	.22	7.8	2.0
23	1.3	1.2	1.6	1.4	2.0	12	1.2	.56	.30	.19	1.4	2.2
24	1.2	1.2	1.2	1.4	3.5	4.2	2.7	.56	.30	.19	47	21
25	1.9	1.3	1.2	1.4	49	3.2	4.5	.60	.42	.24	23	45
26	6.0	1.2	1.4	1.4	9.0	2.8	5.0	.56	.42	.27	1.9	5.9
27	1.9	1.3	1.5	1.3	5.0	2.6	4.7	.52	.26	.19	1.4	3.5
28	1.4	1.4	1.4	1.3	3.9	2.6	3.1	.49	.36	.18	1.1	3.8
29	1.3	2.8	1.4	1.4	---	2.6	4.5	.52	.96	.18	.97	2.3
30	1.2	1.7	1.4	1.5	---	2.4	2.2	.52	.30	.22	.89	1.9
31	8.8	---	1.3	1.5	---	2.2	---	.56	---	.22	2.7	---
TOTAL	88.41	45.8	73.34	85.9	151.8	163.2	111.2	33.33	22.40	46.51	333.33	179.87
MEAN	2.85	1.53	2.37	2.77	5.42	5.26	3.71	1.08	.75	1.50	10.8	6.00
MAX	18	2.8	20	25	49	55	33	3.9	6.3	33	94	45
MIN	.60	1.2	.97	1.2	1.2	1.6	1.2	.49	.26	.18	.54	.97
CFSM	.69	.37	.58	.67	1.32	1.28	.90	.26	.18	.36	2.62	1.46
IN.	.80	.41	.66	.78	1.37	1.47	1.00	.30	.20	.42	3.01	1.62

CAL YR 1976 TOTAL 1303.78 MEAN 3.56 MAX 83 MIN .33 CFSM .86 IN 11.77
WTR YR 1977 TOTAL 1335.09 MEAN 3.66 MAX 94 MIN .18 CFSM .89 IN 12.05

NOTE.--No gage-height record Dec. 26 to Mar. 17.

01467019 MILL CREEK NEAR WILLINGBORO, NJ--Continued

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
OCT							
20...	1000	1.3	10.5	3	.01	--	--
20...	1310	1.9	11.5	5	.03	--	--
20...	1540	2.1	11.5	8	.05	--	--
20...	1640	2.3	11.5	12	.07	--	--
20...	1830	6.4	12.0	63	1.1	--	--
20...	1925	14	13.0	126	4.8	--	--
20...	2035	21	14.0	134	7.6	--	--
20...	2145	26	--	104	7.3	--	--
20...	2235	28	--	96	7.3	--	--
20...	2335	29	--	79	6.2	--	--
21...	1110	7.2	12.0	18	.35	--	--
21...	1425	4.5	--	15	.18	--	--
MAR							
18...	1205	4.6	--	43	.53	--	--
18...	1330	17	--	3135	144	--	--
22...	1045	7.9	7.0	40	.85	--	--
22...	1130	16	8.0	77	3.3	--	--
22...	1235	31	8.0	214	18	--	--
22...	1340	56	8.5	258	39	--	--
22...	1435	85	8.5	2108	484	--	--
22...	1520	126	9.0	213	72	--	--
22...	1620	158	8.5	151	64	--	--
APR							
01...	1500	3.0	8.5	25	.20	--	--
02...	1610	6.2	--	140	2.3	--	--
02...	1705	9.7	7.5	83	2.2	--	--
02...	1835	13	--	139	4.9	--	--
02...	2015	14	--	196	7.4	4	11
02...	2145	12	10.0	310	10	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
OCT							
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--
MAR							
18...	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
APR							
01...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	15	49	69	73	91	98	100
02...	--	--	--	--	--	--	--

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[illegible]0111074514800 MILL CREEK TRIBUTARY NO. 2 AT RANCOCAS, NJ

LOCATION.--Lat 40°01'11", [illegible] 74°51'48", Burlington County, Hydrologic Unit 02040202, at foot of Eaton Lane in Willingboro, 1,000 ft (300 m) upstream of Evergreen Drive, 1.3 mi (2.1 km) upstream from mouth, and 0.6 mi (1.0 km) north of Rancocas.

DRAINAGE AREA.--0.13 mi² (0.34 km²).

PERIOD OF RECORD--
WATER DISCHARGE: Water years 1976 to current year.
CHEMICAL ANALYSES: 1976 Water year.
SEDIMENT ANALYSES: Water years 1976 to current year.

REMARKS.--Site was sampled as part of an urban runoff project.

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
OCT							
20...	1130	.06	10.5	22	.00	--	--
20...	1255	.08	12.0	27	.01	--	--
20...	1340	.08	11.0	165	.04	--	--
20...	1500	.09	11.5	56	.01	--	--
20...	1620	.12	12.0	40	.01	--	--
20...	1750	.21	12.5	108	.06	--	--
20...	1910	.40	13.5	161	.17	--	--
20...	2010	.71	14.0	278	.53	--	--
20...	2120	.71	14.0	98	.19	--	--
20...	2220	.71	--	142	.27	--	--
20...	2320	.71	--	71	.14	--	--
21...	1100	.25	12.0	15	.01	--	--
21...	1440	.25	--	10	.01	--	--
MAR							
18...	1145	.10	--	1813	.49	--	--
18...	1320	.47	--	251	.32	--	--
22...	1030	.30	7.0	150	.12	--	--
22...	1115	.71	8.0	474	.91	--	--
22...	1220	.71	8.5	604	1.2	--	--
22...	1420	.71	9.0	549	1.1	--	--
22...	1510	.65	9.0	305	.54	--	--
22...	1600	.65	8.5	202	.35	--	--
APR							
02...	1525	.13	9.0	127	.05	--	--
02...	2105	1.9	--	54	.28	7	12

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
OCT							
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--
MAR							
18...	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
APR							
02...	--	--	--	--	--	--	--
02...	15	16	20	32	47	71	100

400046074515900 SOUTH BRANCH MILL CREEK AT RANCOCAS, NJ

LOCATION.--Lat 40°00'46", long 74°51'59", Burlington County, Hydrologic Unit 02040202, at end of Ember Lane at Rancocas, 2.5 mi (4.0 km) upstream from mouth, and 3.7 mi (6.0 km) east of Bridgeboro.

DRAINAGE AREA.--0.21 mi² (0.54 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1976 to current year.
CHEMICAL ANALYSES: 1976 Water year.
SEDIMENT ANALYSES: Water years 1976 to current year.

REMARKS.--Site was sampled as part of an urban runoff project.

SEDIMENT DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
OCT								
20...	1025	.08	10.5	17	.00	--	--	--
20...	1215	.08	11.0	13	.00	--	--	--
20...	1400	.10	11.5	32	.01	--	--	--
20...	1445	.13	--	30	.01	--	--	--
20...	1600	.19	--	30	.02	--	--	--
20...	1720	.28	14.0	34	.03	--	--	--
20...	1850	.72	13.0	43	.08	--	--	--
20...	1950	.88	14.0	61	.14	--	--	--
20...	2100	.92	14.0	97	.24	--	--	--
20...	2200	1.1	--	74	.23	--	--	--
20...	2295	1.1	--	58	.17	--	--	--
20...	2400	.90	--	51	.12	--	--	--
21...	1050	.31	12.0	8	.01	--	--	--
21...	1445	.27	--	5	.00	--	--	--
MAR								
18...	1125	.16	--	82	.04	--	--	--
18...	1310	.58	--	494	.77	--	--	--
22...	1010	.17	7.5	61	.03	--	--	--
22...	1105	.50	8.0	401	.54	--	--	--
22...	1210	1.2	8.5	1204	3.9	--	--	--
22...	1305	1.3	8.5	871	3.1	--	--	--
22...	1325	--	8.5	531	--	--	--	--
22...	1405	2.4	9.5	1719	11	--	--	--
22...	1455	1.7	9.5	1250	5.7	--	--	--
APR								
02...	1545	.48	10.0	197	.26	--	--	--
02...	1645	.51	--	67	.09	--	--	--
02...	1740	.53	9.0	447	.65	--	--	--
02...	1930	.50	--	1580	2.1	24	28	35
02...	2130	.48	9.5	51	.07	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM
OCT							
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--
MAR							
18...	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--
APR							
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--
02...	42	52	59	88	92	97	99
02...	--	--	--	--	--	--	--

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01467060 DELAWARE RIVER AT PALMYRA, NJ

LOCATION.--Lat 40°01'05", long 75°02'16", Philadelphia County, PA, Hydrologic Unit 02040202, on right bank opposite Palmyra, 0.5 mi (0.8 km) upstream from Tacony-Palmyra Bridge, 3.5 mi (5.6 km) downstream from Rancocas Creek, and at river mile 107.45 (172.89 km).

DRAINAGE AREA.--7,850 mi^2 (20,330 km^2).

PERIOD OF RECORD.--
TIDE ELEVATIONS: December 1962 to current year. Tidal volumes published from December 1962 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is -10.00 ft (-3.048 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records good. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 7.16 ft (2.182 m) Oct. 9; minimum recorded, -3.80 ft (-1.158 m) Mar. 23, may have been lower other days in the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.11 ft (2.472 m) June 30, 1973; minimum, -8.6 ft (-2.6 m) Dec. 31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since 1899, 8.9 ft (2.7 m) Aug. 24, 1933, from profile furnished by Corps of Engineers, U.S. Army.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	7.16	5.00	5.66	--	--	6.38	6.74	5.70	5.94	5.66	5.42	6.44
high tide	Date	9	4	7	--	--	16	5	6,7	28	1	1	26
Minimum	Elevation	-3.38	-3.68	--	--	--	-3.80	-3.32	-3.44	-3.36	-3.24	--	-3.14
low tide	Date	16	23	--	--	--	23	9	9	3	26	--	14
Mean high tide		4.66	3.84	3.43	--	--	4.56	4.72	4.44	4.64	4.45	--	4.92
Mean water level		1.49	0.70	0.35	--	--	1.35	1.42	1.08	1.33	1.16	--	1.72
Mean low tide		-1.98	-2.75	-2.94	--	--	-2.04	-2.13	-2.63	-2.37	-2.52	--	-1.81

NOTE.--No gage-height record Dec. 31 to Jan 6, Jan. 12 to Mar. 2 and Aug. 12 to Sept. 2.

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA

LOCATION.--Lat 40°01'57", long 74°49'46", Philadelphia County, Hydrologic Unit 02040202, water-quality recorder (40°02'05", 74°59'57") located in inactive building at Torresdale Filter Plant, 1.7 mi (2.7 km) downstream from Poquessing Creek.

DRAINAGE AREA.--7,781 mi² (20,153 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Water years 1969 to current year.
pH: June 1968 to current year.
WATER TEMPERATURES: October 1956 to September 1957, November 1960 to current year.
DISSOLVED OXYGEN: January 1961 to current year.

REMARKS.--Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 865 micromhos Jan. 10; minimum, 81 micromhos Apr 2.
pH: Maximum, 7.8 June 23; minimum, 6.5 Oct. 12.
WATER TEMPERATURES: Maximum, 32.5°C, July 21; minimum, 0.0°C Jan. 1-10.
DISSOLVED OXYGEN: Maximum 13.9 mg/L Jan. 11; minimum 1.6 mg/L Sept. 8, 9.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,450 micromhos Nov. 20, 1964; minimum, 80 micromhos Aug. 30, 1971.
pH: Maximum, 8.5 July 27-28, 1976; minimum, 4.9 Apr. 5, 1969.
WATER TEMPERATURES: Maximum, 30.0°C Sept. 2, 4, 5, 1973; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.2 mg/L Dec. 20, 21, 1972, Feb. 6, 1976; minimum, 0.0 mg/L on many days during 1962 and 1965.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	248	222	237	167	116	131	308	182	194	261	192	201
2	249	222	236	168	122	135	267	182	190	264	114	206
3	252	221	234	171	127	139	245	181	193	260	199	211
4	251	221	236	---	---	---	229	183	192	281	200	212
5	266	219	239	---	---	---	240	185	195	257	202	212
6	255	207	230	---	---	---	234	186	195	258	204	214
7	248	201	225	---	---	---	478	184	216	285	207	217
8	246	195	217	184	124	136	243	191	198	300	212	226
9	289	191	221	246	124	138	248	197	207	357	217	239
10	252	185	210	185	125	133	262	204	210	865	222	339
11	220	122	180	243	127	138	232	167	200	785	312	410
12	160	94	118	187	130	141	206	151	171	---	---	---
13	231	92	107	213	133	148	230	135	153	---	---	---
14	200	94	112	263	136	149	204	134	148	---	---	---
15	215	100	120	197	136	150	257	135	153	---	---	---
16	173	108	128	211	140	154	198	135	149	---	---	---
17	178	118	135	208	144	156	223	137	151	---	---	---
18	200	120	140	210	147	161	205	140	154	---	---	---
19	184	121	137	206	151	162	211	145	157	---	---	---
20	222	121	140	218	154	167	227	148	160	---	---	---
21	170	124	141	227	158	170	211	152	161	---	---	---
22	171	134	147	218	160	169	221	158	170	---	---	---
23	185	138	160	232	163	172	216	164	174	---	---	---
24	165	105	131	224	166	176	234	162	173	---	---	---
25	174	98	118	233	169	181	258	167	179	351	312	323
26	148	98	112	244	170	183	273	169	184	406	308	332
27	157	102	122	406	175	192	346	175	200	405	311	336
28	190	111	131	241	178	191	276	180	198	409	308	331
29	188	119	137	298	181	199	466	183	206	395	306	335
30	170	112	128	249	182	196	299	184	206	422	308	345
31	260	112	135	---	---	---	300	188	209	479	306	337
MONTH	289	92	163	406	116	160	478	134	182	865	114	279

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	368	299	323	247	156	176	152	92	113	152	111	119
2	410	303	323	212	142	162	184	81	99	270	114	127
3	369	300	317	235	134	157	109	84	90	205	117	126
4	357	299	312	384	133	164	---	---	---	162	120	127
5	336	301	311	325	137	163	---	---	---	186	125	136
6	446	302	329	218	141	158	110	101	104	201	132	144
7	389	305	329	180	114	134	182	109	122	203	140	146
8	352	246	287	234	112	132	172	107	120	252	143	152
9	286	243	257	312	113	139	167	107	120	222	142	153
10	308	243	258	366	114	139	215	108	123	178	136	147
11	329	251	272	216	118	137	230	109	124	191	129	139
12	362	263	286	192	127	145	177	111	123	186	130	141
13	439	264	290	---	---	---	186	117	129	194	135	144
14	516	265	289	174	132	150	159	122	130	182	138	144
15	346	267	281	150	94	116	173	125	134	188	134	144
16	333	262	275	142	86	97	170	128	137	299	133	152
17	325	246	266	164	91	110	178	131	141	250	134	147
18	310	239	260	258	103	123	196	135	145	181	134	143
19	393	234	253	190	109	126	192	140	148	183	140	149
20	307	233	248	173	117	129	217	141	151	239	140	153
21	460	234	253	197	121	137	229	145	157	219	142	148
22	354	235	253	332	124	162	211	151	161	206	146	153
23	309	235	248	165	120	134	223	157	168	180	150	157
24	287	235	247	182	125	137	196	162	168	228	154	165
25	---	---	---	205	126	140	249	163	174	339	160	177
26	---	---	---	246	126	144	215	168	177	206	165	175
27	---	---	---	258	132	154	189	153	172	211	169	179
28	---	---	---	296	134	160	167	113	132	260	175	184
29	---	---	---	305	129	160	178	110	122	199	176	181
30	---	---	---	199	133	146	151	109	117	199	176	180
31	---	---	---	208	128	142	---	---	---	203	177	183
MONTH	516	233	282	384	86	142	249	81	136	339	111	152

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	221	181	187	180	162	169	250	219	232	262	225	237
2	233	186	194	---	---	---	240	209	219	286	230	243
3	230	192	197	---	---	---	293	207	221	265	238	244
4	237	195	202	---	---	---	233	209	219	264	236	242
5	240	199	206	---	---	---	283	218	229	272	236	243
6	223	203	208	319	256	266	393	225	239	263	236	241
7	236	205	211	281	254	258	293	225	232	256	231	237
8	245	209	215	268	253	258	273	222	233	256	228	233
9	227	207	214	277	257	261	261	220	227	256	225	232
10	237	212	220	272	258	262	329	222	232	258	230	235
11	254	221	228	266	256	260	238	219	225	249	229	234
12	256	231	241	274	248	259	236	222	227	247	226	233
13	274	244	254	271	256	260	240	219	223	249	226	234
14	283	253	259	272	261	266	263	207	218	247	228	234
15	271	255	260	274	234	250	239	210	224	245	224	232
16	272	251	259	258	237	242	266	226	235	249	227	235
17	300	250	260	260	239	244	244	227	235	284	228	241
18	295	247	256	261	239	245	259	224	233	273	233	243
19	267	242	253	272	239	248	251	220	229	294	234	244
20	299	240	254	264	236	248	251	218	227	---	---	---
21	344	238	255	260	227	240	243	217	226	244	227	232
22	269	232	244	254	223	230	302	204	222	235	224	227
23	255	229	237	248	216	224	244	212	221	231	222	225
24	255	227	235	246	214	220	232	216	222	238	173	214
25	239	173	206	368	208	217	227	207	219	225	124	193
26	178	165	170	247	204	218	238	213	222	196	158	180
27	183	157	167	247	223	231	237	218	226	217	142	156
28	239	156	175	254	221	230	254	220	229	188	96	125
29	183	161	168	252	220	231	265	224	234	139	83	97
30	183	163	167	256	223	233	275	225	237	160	83	93
31	---	---	---	268	226	235	259	226	238	---	---	---
MONTH	344	156	220	368	162	241	393	204	228	294	83	216
YEAR	865	81	196									

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.3	7.0	7.1	7.1	7.0	7.1	7.4	7.2	7.2	7.6	7.3	7.4
2	7.3	7.1	7.2	7.1	7.1	7.1	7.4	7.2	7.2	7.6	7.3	7.4
3	7.3	7.1	7.2	7.1	7.1	7.1	7.3	7.1	7.3	7.3	7.2	7.3
4	7.3	7.1	7.2	---	---	---	7.3	7.2	7.3	7.3	7.2	7.3
5	7.3	7.1	7.2	---	---	---	7.3	7.2	7.3	7.3	7.2	7.3
6	7.2	7.1	7.1	---	---	---	7.3	7.2	7.2	7.3	7.2	7.3
7	7.2	6.8	7.1	---	---	---	7.3	7.1	7.2	7.3	7.2	7.3
8	7.1	7.0	7.1	7.1	7.0	7.1	7.3	7.1	7.2	7.4	7.2	7.3
9	7.2	6.9	7.1	7.5	7.0	7.2	7.4	7.2	7.3	7.3	7.2	7.3
10	7.2	7.1	7.1	7.5	7.1	7.1	7.4	7.3	7.4	7.6	7.2	7.3
11	7.1	6.9	7.0	7.5	7.1	7.1	7.4	7.3	7.3	7.5	7.3	7.4
12	6.9	6.5	6.8	7.2	7.1	7.2	7.6	7.2	7.2	---	---	---
13	7.1	6.7	6.8	7.2	7.1	7.2	7.6	7.1	7.2	---	---	---
14	7.0	6.8	6.8	7.3	7.2	7.2	7.6	7.1	7.2	---	---	---
15	7.2	6.8	6.9	7.2	7.1	7.2	7.6	7.1	7.2	---	---	---
16	7.0	6.9	6.9	7.2	7.0	7.1	7.5	6.8	7.1	---	---	---
17	7.0	6.9	6.9	7.2	7.1	7.2	7.3	7.1	7.1	---	---	---
18	7.1	6.8	6.9	7.2	7.1	7.2	7.2	6.9	7.1	---	---	---
19	7.0	6.8	6.9	7.2	7.1	7.2	7.3	7.1	7.2	---	---	---
20	7.0	6.9	6.9	7.2	6.7	7.1	7.3	7.1	7.2	---	---	---
21	7.0	6.6	7.0	7.3	7.0	7.2	7.3	7.2	7.2	---	---	---
22	7.1	7.0	7.1	7.3	7.1	7.2	7.5	7.2	7.3	---	---	---
23	7.1	7.0	7.1	7.3	7.2	7.2	7.3	7.2	7.3	---	---	---
24	7.1	6.9	7.0	7.3	7.2	7.2	7.3	7.2	7.3	---	---	---
25	7.0	6.8	6.9	7.3	7.1	7.2	7.3	7.2	7.3	7.1	7.1	7.1
26	7.0	6.8	6.9	7.3	7.2	7.2	7.3	7.2	7.2	7.2	7.1	7.1
27	7.0	6.9	7.0	7.4	7.2	7.2	7.4	7.2	7.3	7.3	7.1	7.2
28	7.1	7.0	7.1	7.3	7.1	7.2	7.3	7.2	7.2	7.3	7.1	7.2
29	7.1	7.0	7.1	7.3	7.1	7.2	7.4	7.2	7.2	7.4	7.2	7.3
30	7.1	7.0	7.1	7.3	7.1	7.2	7.4	7.3	7.3	7.3	7.2	7.3
31	7.1	7.0	7.1	---	---	---	7.4	7.3	7.3	7.3	7.3	7.3
MONTH	7.3	6.5	7.0	7.5	6.7	7.2	7.6	6.8	7.2	7.6	7.1	7.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.4	7.3	7.3	7.2	6.9	7.1	7.6	7.0	7.2	7.2	7.0	7.0
2	7.3	7.2	7.3	7.2	7.0	7.1	7.1	6.9	7.0	7.6	7.0	7.1
3	7.3	7.2	7.3	7.2	7.0	7.1	7.0	7.0	7.0	7.5	6.9	7.0
4	7.3	7.2	7.3	7.2	6.9	7.0	---	---	---	7.5	7.0	7.1
5	7.3	7.1	7.2	7.5	7.0	7.1	---	---	---	7.4	7.0	7.0
6	7.3	7.2	7.3	7.5	7.0	7.1	7.1	7.0	7.1	7.4	6.9	7.1
7	7.3	7.2	7.2	7.1	6.9	7.0	7.5	7.1	7.2	7.5	7.0	7.1
8	7.3	.1	7.2	7.5	6.8	7.0	7.6	7.1	7.2	7.5	7.0	7.1
9	7.2	.1	7.2	7.1	6.9	7.0	7.5	7.0	7.2	7.6	7.1	7.2
10	7.6	7.0	7.1	7.2	6.8	7.0	7.6	7.1	7.2	7.5	7.1	7.2
11	7.2	7.0	7.1	7.5	6.9	7.1	7.3	7.1	7.2	7.6	7.1	7.2
12	7.2	7.1	7.2	7.4	7.0	7.1	7.6	7.1	7.2	7.6	7.1	7.3
13	7.2	7.1	7.2	---	---	---	7.6	7.1	7.3	7.6	7.1	7.3
14	7.6	7.2	7.2	7.1	7.1	7.1	7.6	7.1	7.3	7.4	7.2	7.3
15	7.3	7.2	7.2	7.1	6.8	6.9	7.6	7.1	7.2	7.4	7.2	7.3
16	7.3	7.2	7.3	7.0	6.7	6.8	7.3	7.1	7.2	7.3	7.1	7.3
17	7.6	7.2	7.3	7.0	6.8	6.9	7.3	7.1	7.2	7.4	7.2	7.3
18	7.6	7.2	7.3	7.5	6.9	7.1	7.6	7.1	7.2	7.4	7.1	7.2
19	7.6	7.0	7.3	7.5	7.0	7.2	7.6	7.1	7.3	7.4	7.2	7.3
20	7.6	6.8	7.3	7.5	7.0	7.1	7.5	7.1	7.2	7.4	7.1	7.3
21	7.6	7.1	7.3	7.5	7.0	7.1	7.6	7.0	7.3	7.4	7.1	7.3
22	7.4	7.2	7.3	7.6	7.0	7.1	7.6	7.1	7.3	7.6	7.1	7.3
23	7.6	7.1	7.3	7.5	7.0	7.2	7.3	7.1	7.2	7.5	7.1	7.2
24	7.4	7.2	7.3	7.3	7.0	7.2	7.6	7.1	7.2	7.1	7.0	7.1
25	---	---	---	7.2	7.1	7.2	7.6	7.1	7.2	7.1	6.9	7.0
26	---	---	---	7.2	7.1	7.2	7.6	7.1	7.3	7.0	6.8	6.9
27	---	---	---	7.3	7.1	7.2	7.3	7.1	7.2	7.2	6.9	7.0
28	---	---	---	7.5	7.1	7.2	7.2	7.0	7.1	7.3	6.9	7.0
29	---	---	---	7.3	7.2	7.2	7.1	6.9	7.0	7.3	6.9	7.1
30	---	---	---	7.3	7.1	7.2	7.4	7.0	7.0	7.1	6.9	7.1
31	---	---	---	7.2	7.2	7.2	---	---	---	7.1	6.9	7.0
MONTH	7.6	6.8	7.3	7.6	6.7	7.1	7.6	6.9	7.2	7.6	6.8	7.2

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.0	6.9	7.0	7.3	7.0	7.1	7.3	7.0	7.1	7.1	6.8	7.0
2	7.0	6.7	6.9	---	---	---	7.1	7.0	7.0	7.1	6.9	7.0
3	7.0	6.8	6.9	---	---	---	7.0	6.9	7.0	7.0	6.9	6.9
4	7.0	6.8	6.9	---	---	---	7.0	6.9	6.9	7.1	6.8	7.0
5	7.0	6.8	6.9	---	---	---	7.2	6.9	7.0	7.1	6.9	7.0
6	7.0	6.8	6.9	7.5	7.1	7.2	7.1	6.9	6.9	7.0	6.9	7.0
7	6.9	6.8	6.9	7.2	7.1	7.2	7.1	6.9	7.0	7.0	6.8	6.9
8	7.0	6.8	6.9	7.2	7.0	7.1	7.1	6.9	7.0	7.0	6.8	6.9
9	7.0	6.8	6.9	7.2	7.0	7.1	7.1	6.9	7.0	7.0	6.8	6.9
10	6.9	6.8	6.9	7.3	7.0	7.1	7.3	6.9	7.1	7.0	6.8	6.9
11	---	---	---	7.3	7.1	7.1	7.2	6.9	7.0	7.0	6.8	7.0
12	---	---	---	7.2	7.1	7.1	7.3	6.9	7.0	7.1	6.9	7.0
13	---	---	---	7.1	7.1	7.1	7.0	6.9	7.0	7.2	6.8	7.0
14	7.5	7.1	7.2	7.2	7.0	7.1	7.0	6.8	7.0	7.2	6.9	7.1
15	7.5	7.1	7.3	7.2	6.9	7.1	7.0	6.8	6.9	7.2	6.9	7.1
16	7.7	7.2	7.5	7.2	6.9	7.1	7.1	6.8	7.0	7.2	6.9	7.0
17	7.7	7.2	7.5	7.2	6.9	7.1	7.1	6.9	7.0	7.1	6.9	7.0
18	7.6	7.3	7.5	7.2	6.9	7.1	7.0	6.8	6.9	7.2	6.9	7.0
19	7.6	7.3	7.4	7.2	6.9	7.1	7.1	6.8	6.9	7.1	6.9	7.0
20	7.7	7.3	7.5	7.2	6.9	7.0	7.0	6.8	6.9	---	---	---
21	7.7	7.4	7.5	7.2	6.9	7.0	7.1	6.8	6.9	7.1	6.9	7.0
22	7.7	7.4	7.5	7.3	7.0	7.1	7.1	6.8	7.0	7.0	6.9	7.0
23	7.8	7.4	7.5	7.4	7.0	7.1	7.1	6.9	7.0	7.0	6.9	7.0
24	7.7	7.3	7.5	7.6	7.0	7.2	7.1	6.8	7.0	7.0	6.8	6.9
25	7.4	7.2	7.3	7.3	7.1	7.2	7.5	6.9	7.1	7.0	6.8	6.9
26	7.3	7.0	7.2	7.4	7.0	7.2	7.1	6.9	7.0	7.0	6.9	6.9
27	7.1	7.0	7.1	7.5	7.0	7.2	7.1	6.8	7.0	6.9	6.7	6.9
28	7.4	7.0	7.2	7.4	7.0	7.3	7.1	6.9	7.0	6.9	6.7	6.8
29	7.2	7.0	7.1	7.5	7.0	7.3	7.1	6.9	7.0	6.8	6.6	6.7
30	7.2	7.0	7.1	7.3	7.0	7.2	7.1	6.9	7.0	6.9	6.6	6.7
31	---	---	---	7.3	6.9	7.1	7.2	6.9	7.0	---	---	---
MONTH	7.8	6.7	7.2	7.6	6.9	7.1	7.5	6.8	7.0	7.2	6.6	6.9
YEAR	7.8	6.5	7.1									

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	17.5	19.0	9.5	8.5	9.0	6.5	1.5	4.0	2.0	0.0	1.0
2	19.0	17.5	18.5	9.0	7.5	8.5	4.5	1.5	3.5	8.0	0.0	1.0
3	18.5	17.0	18.0	9.0	8.5	9.0	4.0	1.5	3.5	0.5	0.0	0.5
4	19.0	17.0	18.5	---	---	---	4.0	1.0	3.5	0.5	0.0	0.5
5	19.0	17.5	18.5	---	---	---	4.0	1.0	3.5	0.5	0.0	0.0
6	18.5	17.5	18.0	---	---	---	4.0	1.0	3.0	0.0	0.0	0.0
7	18.5	17.5	18.0	---	---	---	8.0	1.5	4.5	0.5	0.0	0.0
8	18.5	18.0	18.0	8.5	6.5	8.0	7.0	1.0	3.5	0.0	0.0	0.0
9	19.5	18.0	18.5	7.5	6.0	7.0	3.0	1.5	2.5	0.0	0.0	0.0
10	18.0	17.5	17.5	7.5	6.5	7.0	3.5	1.5	2.5	2.0	0.0	0.5
11	17.0	15.5	16.5	7.0	6.0	6.5	3.5	1.5	2.5	2.0	1.0	1.5
12	15.5	14.5	15.0	6.5	6.0	6.5	2.0	1.5	2.0	---	---	---
13	16.0	14.5	14.5	8.0	5.5	6.0	2.5	1.0	1.5	---	---	---
14	15.0	14.0	14.0	7.0	5.0	5.5	1.5	0.5	1.0	---	---	---
15	15.0	13.0	14.0	6.0	5.0	5.5	2.0	0.5	1.0	---	---	---
16	14.5	13.5	14.0	6.0	5.0	5.5	2.5	1.5	2.0	---	---	---
17	14.0	13.0	13.5	6.0	5.0	5.5	3.0	2.0	2.5	---	---	---
18	13.5	12.0	13.0	6.0	5.5	5.5	3.0	2.0	2.5	---	---	---
19	13.0	11.0	12.5	6.0	5.5	6.0	3.0	1.5	2.5	---	---	---
20	14.0	12.0	12.5	6.0	5.5	6.0	3.5	2.5	3.0	---	---	---
21	13.5	11.5	13.0	7.5	5.5	6.0	3.0	1.5	2.5	---	---	---
22	12.0	11.5	12.0	8.0	4.5	5.5	2.0	1.0	2.0	---	---	---
23	11.5	11.0	11.5	7.5	4.5	5.0	3.0	1.0	2.0	---	---	---
24	11.5	10.5	11.0	7.0	4.0	5.0	3.0	1.5	2.0	---	---	---
25	11.0	10.5	10.5	7.0	4.5	5.5	2.0	1.0	1.5	0.5	0.5	0.5
26	13.0	10.5	10.5	8.0	4.5	5.5	3.0	1.5	2.0	1.0	0.5	0.5
27	11.0	10.0	10.5	7.0	5.5	6.0	2.0	1.5	1.5	1.0	0.5	0.5
28	11.0	9.5	10.0	6.5	5.5	6.0	1.5	1.0	1.5	1.0	0.5	1.0
29	11.0	9.5	10.0	8.0	5.5	6.0	1.5	1.0	1.5	2.0	0.5	1.0
30	10.5	9.0	9.5	8.0	1.5	5.0	1.0	0.5	0.5	1.0	0.5	0.5
31	11.0	9.5	9.5	---	---	---	1.0	0.5	0.5	1.0	0.5	0.5
MONTH	19.5	9.0	14.0	9.5	1.5	6.5	8.0	0.5	2.5	8.0	0.0	0.5

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	0.5	0.5	7.5	5.0	5.5	12.5	11.5	12.0	17.5	14.0	15.0
2	1.0	0.5	0.5	7.0	4.0	5.0	11.5	10.5	11.0	18.0	15.0	16.0
3	0.5	0.5	0.5	5.0	4.0	4.5	11.0	10.5	10.5	17.5	15.5	16.5
4	0.5	0.5	0.5	9.0	4.0	5.0	---	---	---	17.0	16.0	16.5
5	1.0	0.5	0.5	8.5	5.0	6.0	---	---	---	18.0	16.0	17.0
6	1.0	0.5	0.5	7.0	6.0	6.0	9.0	8.5	8.5	20.5	17.0	18.0
7	1.0	0.5	0.5	7.0	5.0	5.5	12.0	7.0	8.5	19.5	18.0	19.0
8	1.0	0.5	0.5	7.5	5.0	5.5	10.0	7.5	8.5	21.0	18.0	19.0
9	0.5	0.5	0.5	9.0	5.5	6.0	10.0	7.0	8.5	19.0	18.0	18.5
10	1.0	0.5	0.5	11.0	6.0	7.0	12.0	7.5	8.5	18.5	16.0	17.5
11	0.5	0.5	0.5	10.5	6.5	7.5	14.0	7.5	9.5	18.5	16.0	17.5
12	1.0	0.5	0.5	---	---	---	13.0	8.0	10.5	19.0	17.0	17.5
13	1.0	0.5	0.5	---	---	---	14.5	11.0	12.0	19.0	17.5	18.0
14	1.5	0.5	1.0	11.5	10.5	11.0	14.0	12.0	13.0	19.0	17.5	18.0
15	2.0	1.0	1.5	10.5	8.0	9.5	15.0	12.0	14.0	19.5	17.5	18.0
16	2.5	1.0	2.0	8.5	7.5	8.0	17.5	12.0	15.0	20.5	18.0	19.0
17	2.0	1.0	1.5	8.5	7.5	8.0	16.5	15.0	16.0	23.0	18.5	20.0
18	2.5	1.0	1.5	8.5	8.0	8.0	17.5	15.5	16.5	23.0	17.5	20.5
19	2.0	1.0	1.5	8.5	7.5	8.0	18.5	16.5	17.0	22.0	20.5	21.0
20	2.0	1.5	1.5	7.5	6.5	7.0	18.0	16.5	17.5	23.0	20.5	21.0
21	2.5	1.0	2.0	8.5	6.5	7.0	19.0	17.0	17.5	23.5	21.0	22.0
22	3.0	1.0	2.0	9.5	6.0	7.0	20.0	17.5	18.5	24.5	22.0	23.0
23	5.0	2.0	3.0	7.5	6.5	7.0	21.0	18.5	19.0	27.5	22.5	23.5
24	4.0	2.5	3.0	7.0	5.5	6.0	19.5	18.5	18.5	25.5	23.5	24.0
25	---	---	---	7.0	5.0	5.5	19.5	17.0	18.5	27.0	24.0	24.5
26	---	---	---	7.5	5.0	5.5	19.5	17.0	18.5	26.0	22.5	24.5
27	---	---	---	10.0	5.5	6.5	19.0	16.0	17.5	26.0	24.0	25.0
28	---	---	---	9.0	6.0	6.5	17.0	14.5	15.5	26.5	24.5	25.5
29	---	---	---	13.0	6.5	8.0	15.0	13.0	14.5	28.0	24.5	25.5
30	---	---	---	13.0	8.5	9.5	15.0	13.5	14.5	25.0	24.0	24.5
31	---	---	---	13.0	10.0	11.5	---	---	---	25.0	24.0	24.5
MONTH	5.0	0.5	1.0	13.0	4.0	7.0	21.0	7.0	14.0	28.0	14.0	20.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	24.0	24.5	28.0	27.0	27.5	28.5	28.0	28.5	29.0	27.0	28.0
2	25.5	23.5	24.5	---	---	---	29.5	25.0	28.0	29.5	27.5	28.0
3	25.5	24.5	24.5	---	---	---	28.0	26.5	28.0	29.5	28.0	28.5
4	25.5	23.5	24.5	---	---	---	29.5	27.0	28.0	29.5	27.5	28.5
5	27.0	24.0	24.5	---	---	---	30.0	27.5	28.5	29.0	27.5	28.0
6	24.5	23.0	24.0	30.5	28.5	29.0	29.5	28.5	29.0	28.5	27.5	28.0
7	24.0	22.5	23.5	28.5	28.0	28.5	30.0	28.0	29.0	28.0	27.0	28.0
8	23.5	21.5	23.0	29.5	27.5	28.5	30.0	28.5	29.0	28.0	26.5	27.5
9	23.0	21.5	22.5	29.5	28.0	29.0	30.5	28.5	29.5	27.5	26.0	27.0
10	22.5	20.5	22.0	29.5	28.5	29.0	30.0	29.0	29.5	27.5	26.5	27.0
11	22.5	20.5	22.0	29.0	28.0	28.5	30.0	29.0	29.5	27.0	25.5	26.5
12	22.5	21.5	22.0	29.0	28.0	28.5	30.0	29.0	29.5	26.5	25.0	26.0
13	23.5	22.5	23.0	29.5	28.5	29.0	29.5	29.0	29.5	26.0	25.0	26.0
14	24.0	23.0	23.5	30.0	29.0	29.5	29.5	28.5	29.0	25.5	25.0	25.5
15	23.5	23.0	23.0	30.5	29.0	30.0	29.5	28.5	29.0	25.5	24.0	25.0
16	24.0	23.0	23.5	31.0	29.5	30.0	30.0	29.0	29.0	25.0	24.0	24.5
17	24.5	23.5	24.0	32.0	30.0	30.5	29.0	28.5	29.0	25.5	24.5	25.0
18	25.0	24.0	24.0	31.5	30.5	31.0	29.0	27.5	28.5	26.5	24.5	25.0
19	25.5	24.5	25.0	32.0	30.5	31.0	29.0	27.5	28.0	26.0	25.0	25.5
20	26.0	24.5	25.0	31.5	31.0	31.0	29.0	27.0	28.0	---	---	---
21	26.0	24.5	25.0	32.5	31.0	31.5	28.5	26.5	27.5	25.0	24.5	25.0
22	26.5	24.5	25.5	32.0	31.0	31.5	28.0	24.5	27.0	25.0	23.5	24.5
23	27.5	25.0	25.5	31.5	30.0	30.5	28.0	26.0	27.0	24.5	23.0	24.0
24	27.0	25.0	26.0	31.0	30.0	30.5	27.5	26.0	27.0	24.0	21.0	23.5
25	26.5	25.5	26.0	30.0	28.0	29.5	27.0	25.5	26.5	23.5	19.0	22.5
26	27.0	25.5	26.0	29.5	28.0	29.0	27.0	26.0	26.5	23.0	21.5	22.5
27	27.5	26.0	26.5	29.0	27.5	29.0	27.0	26.5	26.5	22.0	19.5	21.0
28	28.5	26.5	27.0	29.0	28.0	28.5	27.5	26.5	27.0	20.0	17.0	18.5
29	28.0	26.5	27.5	29.0	28.0	28.5	28.0	27.0	27.5	18.0	16.5	17.0
30	28.0	27.0	27.5	28.5	28.0	28.5	28.5	27.0	27.5	19.0	17.0	17.5
31	---	---	---	29.5	28.0	28.5	28.5	27.5	28.0	---	---	---
MONTH	28.5	20.5	24.5	32.5	27.0	29.5	30.5	24.5	28.0	29.5	16.5	25.0
YEAR	32.5	0.0	15.0									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	6.1	7.0	11.0	10.2	10.7	12.0	10.8	11.1	13.8	11.3	12.8
2	8.1	6.0	7.1	11.0	10.7	10.9	11.7	10.9	11.2	13.5	11.0	12.4
3	7.7	6.2	7.1	10.9	10.5	10.7	11.5	11.2	11.4	12.9	11.6	12.0
4	8.6	6.6	7.5	---	---	---	11.6	11.1	11.3	12.0	11.6	11.8
5	8.5	7.0	7.9	---	---	---	11.4	11.1	11.2	12.0	11.5	11.7
6	8.3	7.4	7.9	---	---	---	11.5	10.7	11.1	11.8	11.1	11.6
7	8.5	7.3	8.0	---	---	---	11.6	10.5	11.0	11.7	11.1	11.5
8	8.2	7.6	7.9	10.9	10.7	10.8	11.7	10.7	11.2	11.7	11.4	11.5
9	---	---	---	11.1	10.8	11.0	12.7	11.4	12.0	11.5	11.0	11.3
10	8.6	7.9	8.2	11.2	10.9	11.1	12.7	12.3	12.5	11.7	10.9	11.3
11	8.5	7.8	8.1	11.3	10.8	11.1	12.8	12.2	12.3	13.9	11.1	12.3
12	8.8	7.9	8.4	11.4	11.0	11.2	13.0	12.4	12.7	---	---	---
13	8.8	8.1	8.4	11.4	11.1	11.3	13.2	12.4	12.9	---	---	---
14	9.1	8.3	8.9	11.5	11.3	11.4	13.1	12.8	13.0	---	---	---
15	9.3	8.8	9.1	11.7	10.8	11.3	13.0	12.7	12.9	---	---	---
16	9.2	8.8	9.0	11.5	11.2	11.3	12.9	12.5	12.7	---	---	---
17	9.0	8.8	8.9	11.5	11.2	11.3	12.8	12.5	12.7	---	---	---
18	9.0	8.7	8.9	11.5	11.2	11.3	12.8	12.4	12.6	---	---	---
19	8.8	8.6	8.7	11.4	11.0	11.3	12.9	12.5	12.7	---	---	---
20	8.9	7.3	8.5	11.4	11.1	11.3	12.9	11.6	12.7	---	---	---
21	9.2	7.7	8.5	11.4	10.9	11.2	12.8	12.5	12.6	---	---	---
22	9.4	8.9	9.2	11.4	11.0	11.2	12.1	11.1	11.8	---	---	---
23	9.5	9.2	9.3	11.5	11.2	11.3	11.3	10.9	11.1	---	---	---
24	10.0	9.6	9.8	11.5	11.1	11.3	11.2	10.9	11.1	---	---	---
25	10.2	9.7	9.9	11.5	11.0	11.2	11.4	11.1	11.3	10.9	10.4	10.6
26	10.3	9.9	10.1	11.4	11.0	11.1	11.7	11.3	11.5	11.2	10.7	11.0
27	10.2	9.2	10.1	11.5	10.8	11.0	11.8	11.6	11.7	11.3	10.8	11.0
28	10.2	9.9	10.1	11.2	10.7	10.9	11.9	11.5	11.7	11.3	10.6	11.0
29	10.4	9.9	10.1	11.1	10.6	10.8	11.8	11.2	11.6	13.1	10.8	11.3
30	10.6	10.2	10.4	11.3	10.7	10.9	11.9	11.2	11.8	12.5	11.0	11.2
31	10.7	9.5	10.4	---	---	---	12.1	11.7	11.8	11.4	11.0	11.2
MONTH	10.7	6.0	8.8	11.7	10.2	11.1	13.2	10.5	11.9	13.9	10.4	11.5

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.4	11.0	11.2	13.0	11.8	12.4	9.5	8.5	9.0	9.5	9.0	9.3
2	11.3	10.7	11.1	13.2	12.1	12.7	8.7	7.5	8.4	9.5	8.4	9.3
3	11.5	10.6	11.1	13.2	12.2	12.6	8.0	7.4	7.6	9.3	8.7	9.1
4	11.3	10.8	11.0	13.2	10.8	12.4	---	---	---	9.1	8.6	8.9
5	10.8	9.2	10.5	13.2	11.2	12.5	---	---	---	9.2	8.1	8.5
6	10.9	10.5	10.7	13.2	11.6	12.6	11.5	11.4	11.4	8.9	7.8	8.1
7	10.7	10.2	10.5	13.0	11.9	12.3	11.7	11.2	11.5	8.0	7.2	7.7
8	11.2	10.0	10.6	13.0	11.8	12.3	11.6	10.9	11.3	7.9	7.3	7.6
9	11.2	9.9	10.7	13.0	11.7	12.3	11.2	10.7	11.1	7.9	7.2	7.6
10	11.2	9.7	10.6	12.4	11.1	12.2	11.1	10.5	11.0	9.0	7.0	7.8
11	11.2	9.7	10.5	12.8	10.9	11.9	11.2	10.4	10.9	9.0	7.5	7.9
12	11.2	9.7	10.4	11.8	10.8	11.4	11.2	10.4	10.7	8.9	7.4	8.0
13	11.1	9.4	10.1	---	---	---	11.1	9.1	10.3	9.1	7.5	8.3
14	---	---	---	10.9	10.4	10.7	10.2	8.8	9.7	9.2	7.9	8.6
15	12.9	11.2	10.8	11.0	10.4	10.7	9.7	9.0	9.4	9.0	8.0	8.6
16	12.9	11.3	11.9	11.6	11.0	11.4	9.2	8.5	8.8	9.1	7.7	8.5
17	13.0	11.3	12.1	11.7	11.3	11.5	9.1	8.1	8.4	9.8	7.6	8.9
18	12.9	11.2	11.8	11.6	10.9	11.4	9.0	7.9	8.3	9.2	8.2	8.8
19	12.4	11.2	11.7	11.7	11.3	11.5	9.0	7.1	8.5	9.3	8.1	8.6
20	11.9	11.1	11.6	11.9	11.5	11.7	9.1	6.8	8.1	9.1	6.8	8.1
21	12.9	11.3	11.8	12.2	11.7	12.0	9.0	6.9	8.3	9.2	6.9	8.1
22	13.2	11.5	12.1	12.8	10.8	11.9	9.2	8.1	8.6	9.0	6.8	7.8
23	12.8	11.8	12.1	12.9	10.9	11.5	9.1	8.0	8.4	7.3	6.6	6.9
24	12.9	10.8	11.8	12.0	10.9	11.5	8.4	7.8	8.1	7.0	5.1	6.1
25	---	---	---	12.9	10.9	12.1	8.2	7.6	7.9	5.8	3.7	4.7
26	---	---	---	13.0	10.8	12.2	8.4	7.6	7.8	---	---	---
27	---	---	---	13.0	10.8	12.0	9.1	7.4	8.1	6.8	4.7	5.9
28	---	---	---	12.8	10.8	11.6	10.0	8.3	8.7	7.3	4.6	5.9
29	---	---	---	12.0	10.5	11.5	9.5	9.0	9.2	7.3	4.7	6.3
30	---	---	---	11.8	10.4	11.3	9.5	9.2	9.4	6.6	4.5	6.1
31	---	---	---	11.2	9.4	10.3	---	---	---	8.8	4.6	5.7
MONTH	13.2	9.2	11.2	13.2	9.4	11.8	11.7	6.8	9.2	9.8	3.7	7.7

01467030 DELAWARE RIVER AT TORRESDALE INTAKE, AT PHILADELPHIA, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.8	4.3	5.3	6.2	2.1	4.3	7.1	3.8	5.7	6.6	3.2	5.3
2	6.0	1.9	5.0	---	---	---	6.7	4.5	5.4	6.6	3.8	5.3
3	5.9	3.6	5.1	---	---	---	5.1	3.0	3.8	6.4	3.7	5.2
4	5.6	3.4	4.8	---	---	---	5.7	2.1	3.8	6.6	3.5	5.2
5	5.6	3.9	4.9	---	---	---	5.8	3.3	4.3	6.8	4.3	5.2
6	5.4	3.7	4.7	7.6	3.0	5.1	6.0	3.5	4.4	6.3	4.2	5.2
7	5.3	3.8	4.5	5.2	2.7	4.3	6.1	3.8	4.7	5.9	2.9	4.5
8	5.3	4.0	4.5	5.2	1.8	3.8	6.4	3.8	4.9	6.0	1.6	4.6
9	5.4	3.7	4.7	5.0	1.9	3.6	6.8	3.8	5.2	6.2	1.6	4.5
10	5.9	3.9	4.7	6.1	2.8	4.1	6.9	3.9	5.4	6.1	2.5	5.0
11	5.8	4.2	4.9	6.2	3.2	4.5	6.4	3.6	5.4	6.1	3.0	5.1
12	6.4	4.2	5.3	5.6	3.5	4.4	6.1	3.4	5.4	6.3	3.4	5.4
13	7.3	4.6	6.1	4.9	3.7	4.3	5.8	3.4	5.2	6.9	2.9	5.6
14	7.2	5.0	6.4	5.1	3.0	4.1	5.9	2.3	4.9	7.2	4.3	6.1
15	7.7	5.0	6.4	5.4	2.5	4.3	5.7	4.2	4.9	7.0	4.3	6.0
16	8.8	4.7	7.2	5.8	2.5	4.5	5.7	2.8	4.8	6.9	2.8	5.4
17	8.8	5.0	7.7	6.2	2.9	4.9	5.9	3.6	4.7	6.9	3.7	5.3
18	9.0	5.8	7.8	6.3	3.4	5.0	5.8	3.1	4.5	6.7	3.9	5.2
19	9.2	6.3	7.9	6.3	3.1	4.8	5.9	2.3	4.5	6.5	3.8	5.3
20	9.0	6.2	8.0	5.7	2.8	4.5	6.0	2.7	4.5	---	---	---
21	8.6	6.8	7.7	6.0	2.9	4.4	6.4	3.1	4.8	6.0	3.6	5.1
22	8.5	6.4	7.6	6.7	4.0	4.9	6.9	3.1	5.5	5.5	3.4	4.9
23	8.5	6.4	7.5	7.1	3.6	5.3	7.1	4.4	5.8	5.9	4.3	4.8
24	8.3	5.9	7.2	7.7	4.5	5.8	6.4	3.1	5.6	6.8	3.1	4.7
25	7.0	5.2	6.5	6.5	5.0	5.8	6.7	3.9	5.7	7.9	4.2	5.4
26	6.0	3.8	5.5	7.2	3.7	5.6	6.8	3.5	5.8	6.8	4.8	5.5
27	5.8	3.5	4.9	7.3	3.6	5.5	6.7	2.9	5.7	7.6	5.2	6.6
28	6.3	3.0	4.8	7.1	2.8	5.7	6.7	3.8	5.7	8.7	7.3	8.0
29	5.4	2.6	4.5	7.5	3.1	6.1	6.8	4.1	5.8	8.7	8.3	8.5
30	5.9	2.2	4.4	6.6	3.2	5.8	6.9	4.1	5.7	8.4	7.6	8.3
31	---	---	---	7.2	3.5	5.8	6.9	3.7	5.6	---	---	---
MONTH	9.2	1.9	5.9	7.7	1.8	4.9	7.1	2.1	5.1	8.7	1.6	5.6
YEAR	13.9	1.6	8.6									

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ

LOCATION.--Lat 39°57'07", long 74°58'10", Burlington County, Hydrologic Unit 02040202, at bridge on Kings Highway, 0.8 mi (1.3 km) southeast of Lenola, and 0.6 mi (1.0 km) northwest of the Moorestown Mall.

DRAINAGE AREA.--12.8 mi^2 (33.2 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	0810	323	7.3	5.0	8	10.8	1.4	B140	50	B24	<20	96
FEB 02...	0830	764	6.6	1.0	11	11.0	2.7	B2400	5	B150	<2	99
MAR 31...	0910	325	6.6	15.5	20	6.2	3.0	110	50	42	240	86
MAY 18...	0820	365	7.2	20.0	10	11.2	6.9	1100	540	170	<20	120
JUN 16...	0900	292	7.1	21.5	3	6.3	5.8	1100	400	B23000	20	71
JUL 25...	0930	345	7.6	23.5	4	6.9	11	--	60	--	46	91
AUG 15...	0945	168	6.4	23.0	65	5.0	3.9	--	16000	--	9200	46

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	76	27	6.9	13	6.8	24	0	20	1.9	--	70	25
FEB 02...	78	28	7.0	87	5.6	26	0	21	10	--	81	160
MAR 31...	78	24	6.4	17	5.2	10	0	8	4.0	--	65	32
MAY 18...	110	34	8.3	21	7.0	17	0	14	1.7	.0	75	36
JUN 16...	51	20	5.0	18	4.8	24	0	20	3.1	--	49	31
JUL 25...	47	25	6.9	21	7.0	54	0	44	2.2	--	61	34
AUG 15...	44	13	3.2	7.6	4.6	2	0	2	1.3	--	35	13

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	143	10	--	--	--	--	2.5	--	.08	--	2.6
FEB 02...	--	398	8	--	--	--	--	3.4	--	.17	--	5.5
MAR 31...	--	195	20	--	--	--	--	2.9	--	.07	--	--
MAY 18...	11	195	16	--	--	--	--	1.4	--	.07	--	6.3
JUN 16...	--	166	0	--	--	--	--	1.4	--	.06	--	4.7
JUL 25...	--	229	75	.26	.04	1.6	1.8	3.4	3.7	.24	.02	8.6
AUG 15...	--	98	53	.70	.02	.37	1.3	1.7	2.4	.33	.01	4.4

01467069 NORTH BRANCH PENNSAUKEN CREEK NEAR MOORESTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 18...	0820	10	1	30	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 18...	120	15	230	.0	13	0	30	0

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ

LOCATION.--Lat 39°56'30", long 75°00'05", Camden County, Hydrologic Unit 02040202, on bridge on Mill Road in Cherry Hill, 1.1 mi (1.8 km) south of Maple Shade and 3.8 mi (6.1 km) upstream from confluence with the North Branch.

DRAINAGE AREA.--9.16 mi² (23.72 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: October 1967 to September 1976.
CHEMICAL ANALYSES: Water years 1976 to current year.
SEDIMENT ANALYSES: Water years 1970-73.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
NOV 11...	0900	E5.3	340	7.4	7.5	10	8.6	5.6	3400	800
FEB 02...	0915	E5.3	483	7.3	.0	7	11.2	16	81400	9200
MAR 31...	0945	E7.0	366	7.8	15.5	10	7.4	4.1	2800	<20
MAY 10...	0915	E5.3	405	7.8	20.0	15	3.9	9.6	32	7900
JUN 16...	0955	E4.4	333	7.6	19.5	5	5.2	7.6	8300	54000
JUL 25...	1010	E2.1	419	7.9	23.0	4	5.2	--	--	13000
AUG 15...	1025	E14	249	7.0	22.0	30	6.3	4.0	--	9400

DATE	FECAL STREPTOCOCCI MF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV 11...	8500	1100	89	3	24	7.0	18	8.5	105
FEB 02...	87100	>2400	83	1	23	6.2	38	9.1	100
MAR 31...	1000	240	90	29	24	7.2	21	5.7	74
MAY 10...	1100	790	110	32	30	7.9	27	12	95
JUN 16...	4200	790	79	19	22	5.8	20	7.6	73
JUL 25...	--	4900	85	0	23	6.6	32	11	117
AUG 15...	--	1700	71	43	20	5.1	13	5.8	34

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 11...	0	86	6.7	--	47	20	--	181	17
FEB 02...	0	82	8.0	--	58	51	--	246	23
MAR 31...	0	61	1.9	--	55	28	--	201	21
MAY 10...	0	78	2.4	.0	54	29	15	144	25
JUN 16...	0	60	2.9	--	47	21	--	144	11
JUL 25...	0	96	2.4	--	52	32	--	233	11
AUG 15...	0	28	5.4	--	50	19	--	151	17

01467081 SOUTH BRANCH PENNSAUKEN CREEK AT CHERRY HILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	--	--	--	6.2	--	.68	--	5.8
FEB 02...	--	--	--	--	9.0	--	1.0	--	15
MAR 31...	--	--	--	--	5.6	--	.39	--	--
MAY 18...	--	--	--	--	8.4	--	.82	--	7.1
JUN 16...	--	--	--	--	3.0	--	.65	--	5.7
JUL 25...	1.4	.35	6.2	.00	6.2	7.9	2.0	1.4	7.4
AUG 15...	.81	.07	.95	1.2	2.1	3.0	.52	.30	5.9

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 18...	0915	10	1	180	0	0	0	7

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 18...	310	10	150	.0	4	0	20	1

01467120 COOPER RIVER AT NORCROSS ROAD AT LINDENWOLD, NJ

LOCATION.--Lat 39°49'43", long 74°58'55", Camden County, Hydrologic Unit 02040202, at bridge on Norcross Road, 50 ft (15 m) downstream from outflow of Linden Lake, 1.1 mi (1.8 km) southwest of Gibbsboro, and 1.7 mi (2.8 km) south of Glendale.

DRAINAGE AREA.--1.13 mi² (2.93 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 09...	1030	71	7.1	5.0	3	12.8	.6	88	<2	46	<2	20
JAN 26...	1050	426	6.6	1.0	4	13.4	1.6	838	80	46	17	21
APR 05...	1040	82	6.5	10.5	7	5.8	3.6	>60	240	>100	920	36
MAY 17...	1010	73	7.0	20.0	4	8.4	2.5	160	240	B4100	180	22
JUN 08...	1120	65	7.3	18.5	10	8.6	2.0	180	<2	350	39	21
JUL 06...	1015	67	7.2	27.5	3	7.5	2.8	--	20	--	8	20
AUG 10...	1050	63	7.0	26.5	2	5.2	2.8	--	540	--	33	19

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 09...	9	6.7	.9	4.0	1.7	13	0	11	1.7	11	6.6
JAN 26...	6	6.5	1.1	5.0	2.2	18	0	15	7.2	11	7.6
APR 05...	27	10	2.6	5.7	1.7	11	0	9	5.6	11	8.5
MAY 17...	10	6.9	1.2	4.0	1.3	15	0	12	2.4	10	6.6
JUN 08...	7	6.7	1.0	3.2	1.1	17	0	14	1.4	1.1	5.9
JUL 06...	8	6.4	1.0	3.0	1.0	15	0	12	1.5	6.7	5.5
AUG 10...	3	5.9	1.0	3.0	1.6	20	0	16	3.2	5.3	5.8

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 09...	39	7	--	--	--	--	1.4	--	.01	--	4.2
JAN 26...	55	4	--	--	--	--	1.7	--	.10	--	2.8
APR 05...	64	9	--	--	--	--	2.2	--	.06	--	--
MAY 17...	38	8	--	--	--	--	1.4	--	.04	--	6.1
JUN 08...	39	26	--	--	--	--	1.4	--	.03	--	5.9
JUL 06...	48	6	.01	.00	.01	.62	.63	.64	.05	.01	7.2
AUG 10...	54	13	.02	.00	.20	.71	.91	.93	.04	.00	6.3

01467130 COOPER RIVER AT KIRKWOOD, NJ

LOCATION.--Lat 39°50'11", long 75°00'06", Camden County, Hydrologic Unit 02040202, at outlet of Kirkwood Lake in Kirkwood, 100 ft (30 m) east of tracks of Pennsylvania-Reading Seashore Lines, and 1.0 mi (1.6 km) north of Laurel Springs.

DRAINAGE AREA.--5.14 mi² (13.31 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964 to current year.
CHEMICAL ANALYSES: Water years 1964, 1967, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	1045	336	7.5	17.5	5	7.0	7.0	B2600	2	--	<20	44
NOV 09...	1105	380	7.1	6.0	7	10.5	5.2	B3100	5	25	20	100
JAN 26...	1140	383	7.0	2.5	8	11.8	>18	B22	<20	B17	<2	49
APR 05...	1135	247	7.2	12.0	3	7.8	26	96	33	B610	240	43
MAY 17...	1100	407	7.0	20.0	7	10.9	17	--	140	140	130	59
JUN 08...	1210	440	7.8	18.0	10	8.6	>18	>1200	8	750	70	55
JUL 06...	1100	435	8.1	28.0	30	12.0	>35	--	130	--	33	52
AUG 10...	1135	419	7.5	26.0	3	6.9	22	--	79	--	240	55

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 05...	0	13	2.7	26	7.6	73	0	60	3.7	21	52
NOV 09...	44	37	2.6	26	8.0	68	0	56	8.6	22	51
JAN 26...	0	15	2.7	34	8.8	85	0	70	14	23	50
APR 05...	0	13	2.6	20	5.5	54	0	44	5.5	18	31
MAY 17...	14	19	2.9	31	8.5	55	0	45	8.8	21	66
JUN 08...	0	17	3.0	35	10	93	0	76	2.4	22	66
JUL 06...	0	16	2.9	36	10	81	0	66	1.0	23	57
AUG 10...	0	17	3.0	35	12	85	0	70	4.3	22	66

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	173	11	--	--	--	--	10	--	.49	--	8.7
NOV 09...	175	15	--	--	--	--	10	--	.33	--	8.6
JAN 26...	189	10	--	--	--	--	15	--	.91	--	13
APR 05...	119	5	--	--	--	--	9.5	--	.33	--	--
MAY 17...	196	8	--	--	--	--	10	--	.11	--	8.0
JUN 08...	263	14	--	--	--	--	11	--	.17	--	7.8
JUL 06...	196	46	.47	.24	9.1	3.9	13	14	.57	.21	15
AUG 10...	233	27	.38	.09	12	2.0	14	14	.50	.10	6.5

01467130 COOPER RIVER AT KIRKWOOD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	OIL AND GREASE (MG/L)
JUL 06...	1100	80
AUG 10...	1135	9

01467140 COOPER RIVER AT LAWNSIDE, NJ

LOCATION.--Lat 39°52'14", long 75°00'59", Camden County, Hydrologic Unit 02040202, at bridge on Woodcrest Road, and 0.2 mi (0.3 km) upstream from the New Jersey Turnpike.

DRAINAGE AREA.--12.8 mi² (33.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964-65, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 09...	1300	340	7.7	9.0	20	8.1	16	>60000	200	100	<20	58
JAN 26...	1350	92	7.1	5.0	25	12.3	>17	8500	500	1200	12	58
APR 12...	1045	313	7.1	17.0	20	6.6	23	190	<2	>3300	14	86
MAY 17...	1320	393	7.2	21.0	15	5.6	>8.4	8430	500	880	<200	59
JUN 08...	1305	411	7.4	19.0	35	7.3	6.7	970	<200	98	230	61
JUL 06...	1210	408	7.9	25.5	3	1.7	14	--	330	--	140	65
AUG 10...	1245	296	7.2	24.5	6	3.9	9.6	--	9200	--	9200	56

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 09...	0	17	3.8	25	10	79	0	65	2.5	29	36
JAN 26...	0	17	3.8	40	9.2	93	0	76	12	30	62
APR 12...	28	27	4.6	23	7.2	71	0	58	9.0	27	36
MAY 17...	0	18	3.5	27	11	78	0	64	7.9	27	45
JUN 08...	0	18	3.8	29	11	100	0	82	6.4	28	44
JUL 06...	0	20	3.7	31	10	105	0	86	2.1	28	43
AUG 10...	16	17	3.2	22	8.2	49	0	40	4.9	32	33

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITR;TE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 09...	150	27	--	--	--	--	11	--	1.6	--	15
JAN 26...	224	30	--	--	--	--	15	--	3.0	--	24
APR 12...	177	30	--	--	--	--	11	--	.90	--	16
MAY 17...	166	22	--	--	--	--	13	--	1.6	--	6.7
JUN 08...	200	0	--	--	--	--	15	--	1.6	--	7.1
JUL 06...	204	31	.17	.05	10	2.0	12	12	1.3	1.1	4.7
AUG 10...	353	53	.51	.06	5.1	.90	6.0	6.6	1.0	.40	5.9

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'19", Camden County, Hydrologic Unit 02040202, on right bank of Wallworth Lake in Pennypacker Park, 200 ft (61 m) upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi (1.0 km) upstream from North Branch Cooper River, and 7.7 mi (12.4 km) upstream from mouth.

DRAINAGE AREA.--17.4 mi^2 (45.1 km^2).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1964 to current year.
CHEMICAL ANALYSES: Water years 1968 to current year.
SEDIMENT ANALYSES: Water years 1968-73.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: October 1963 to current year.
WATER TEMPERATURES: March to September 1969.
SUSPENDED-SEDIMENT DISCHARGE: March 1968 to May 1970.

REVISED DISCHARGE RECORDS.--WRD-NJ 1969: 1967(M).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 9.29 ft (2.832 m) NGVD.

REMARKS.--Discharge records good. Occasional regulation at low flow from Kirkwood Lake, other small lakes and wastewater treatment plants.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--14 years, 34.0 ft^3/s (0.963 m^3/s), 26.54 in/yr (674 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 570 ft^3/s (16.1 m^3/s) Mar. 22, gage height, 2.72 ft (0.829 m), no other peak above base of 500 ft^3/s (14.2 m^3/s); minimum, 10 ft^3/s (0.28 m^3/s) July 28, gage height, 1.34 ft (0.408 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft^3/s (93.5 m^3/s) Aug. 28, 1971, gage height, 5.46 ft (1.664 m); minimum, 0.8 ft^3/s (0.023 m^3/s) Nov. 13, 1972, gage height, 1.07 ft (0.326 m) regulation from unknown source; minimum daily, 1.2 ft^3/s (0.034 m^3/s) June 27, 1964.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	35	26	18	20	27	20	25	16	15	25	45
2	27	29	26	17	18	24	39	24	19	14	23	21
3	26	26	24	18	17	24	55	24	18	13	22	17
4	27	27	22	19	17	37	27	25	15	13	17	15
5	21	26	24	19	19	33	148	41	14	14	15	15
6	19	22	24	19	24	27	51	30	23	19	24	20
7	18	24	119	21	19	24	28	26	22	27	20	24
8	21	24	60	21	17	24	25	21	17	19	16	16
9	202	22	27	19	24	22	24	24	121	17	32	16
10	68	22	26	156	29	22	23	22	39	17	32	18
11	29	24	26	73	44	22	23	20	21	17	24	16
12	26	22	26	29	42	24	23	20	16	39	27	15
13	26	22	22	18	47	44	23	19	16	25	23	15
14	26	22	21	19	35	70	21	18	17	17	51	17
15	29	22	22	24	29	31	21	17	32	16	25	22
16	27	22	27	26	22	26	20	17	20	15	17	18
17	27	22	26	24	18	21	19	18	16	14	55	22
18	31	22	24	22	18	65	19	21	15	15	32	20
19	33	22	22	21	18	39	20	19	14	16	17	21
20	85	21	29	21	21	29	21	17	14	17	15	148
21	113	21	39	19	21	27	22	17	16	17	13	23
22	31	22	22	17	22	225	22	17	14	15	63	19
23	24	22	21	17	24	126	22	18	14	14	22	30
24	27	22	19	17	82	32	45	17	13	13	139	23
25	37	22	19	18	211	25	104	19	15	18	96	143
26	123	22	29	18	42	23	47	21	16	20	24	27
27	35	26	26	17	31	23	36	18	14	12	19	14
28	24	27	22	22	31	23	27	15	23	12	17	15
29	21	44	22	35	---	24	47	14	36	12	20	13
30	24	29	21	30	---	23	26	14	17	13	17	13
31	76	---	19	25	---	23	---	15	---	13	39	---
TOTAL	1368	735	882	839	962	1209	1048	633	663	518	981	841
MEAN	44.1	24.5	28.5	27.1	34.4	39.0	34.9	20.4	22.1	16.7	31.6	28.0
MAX	202	44	119	156	211	225	148	41	121	39	139	148
MIN	18	21	19	17	17	21	19	14	13	12	13	13
CFSM	2.53	1.41	1.64	1.56	1.98	2.24	2.01	1.17	1.27	.96	1.82	1.61
IN.	2.92	1.57	1.89	1.79	2.06	2.58	2.24	1.35	1.42	1.11	2.10	1.80

CAL YR 1976 TOTAL 12652 MEAN 34.6 MAX 292 MIN 10 CFSM 1.99 IN 27.05
WTR YR 1977 TOTAL 10679 MEAN 29.3 MAX 225 MIN 12 CFSM 1.68 IN 22.83

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)
NOV 11...	1030	22	335	7.7	7.5	15	5.1	8.4	200	3500
FEB 02...	1120	18	415	7.2	1.0	13	7.2	>9.2	82000	3500
MAR 31...	1125	22	346	7.3	17.5	6	3.2	8.3	84200	50
MAY 18...	1130	19	390	7.5	21.0	15	3.3	7.6	770	<200
JUN 16...	1115	20	327	7.3	21.0	6	2.6	7.1	830	800
JUL 25...	1130	13	404	7.5	24.0	3	2.2	12	--	3500
AUG 15...	1200	26	270	7.3	23.5	50	3.7	6.2	--	9200

DATE	FECAL STREPTOCOCCI MF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV 11...	220	350	59	1	17	4.1	22	8.0	71
FEB 02...	81000	540	56	0	16	3.9	47	7.7	85
MAR 31...	1900	920	60	2	17	4.3	19	7.0	71
MAY 18...	530	50	68	0	20	4.4	28	11	90
JUN 16...	5400	230	61	0	18	3.9	22	7.0	78
JUL 25...	--	50	63	0	18	4.4	32	10	100
AUG 15...	--	490	56	4	16	3.9	18	7.4	63

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)
NOV 11...	0	58	2.3	--	31	34	--	171	25
FEB 02...	0	70	8.6	--	31	76	--	234	16
MAR 31...	0	58	5.7	--	27	33	--	157	23
MAY 18...	0	74	4.6	.0	29	44	13	180	17
JUN 16...	0	64	6.3	--	29	31	--	176	18
JUL 25...	0	82	5.1	--	30	44	--	210	24
AUG 15...	0	52	5.1	--	31	27	--	156	31

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	--	5.9	4.0	9.9	11	1.0	--	9.0
FEB 02...	--	--	--	--	--	--	1.4	--	17
MAR 31...	--	--	7.1	.90	8.0	8.5	1.0	--	--
MAY 18...	--	--	--	--	12	--	1.0	--	6.5
JUN 16...	--	--	--	--	7.3	--	1.0	--	8.6
JUL 25...	.24	.06	9.6	1.4	11	11	1.1	.52	9.3
AUG 15...	.37	.05	5.0	3.0	8.0	8.4	1.0	.46	7.0

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 10...	1130	10	1	520	0	0	0	6

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 10...	170	12	100	.0	6	0	30	0

01467181 NORTH BRANCH COOPER RIVER AT ERLTON, NJ

LOCATION.--Lat 39°54'31", long 75°01'32", Camden County, Hydrologic Unit 02040202, at bridge on Cooper River Drive, 2.3 mi (3.7 km) south of Cherry Hill Mall, and 1.2 mi (1.9 km) southeast of Garden State Park.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 11...	0945	362	7.6	7.5	15	9.3	6.6	--	<20	--	<20	86
FEB 02...	1020	467	7.2	.5	23	11.4	16	4500	330	220	350	68
MAR 31...	1035	338	7.6	16.5	15	7.7	15	--	790	210	170	89
MAY 18...	1035	394	7.6	19.5	15	6.8	22	2000	170	140	230	89
JUN 16...	1040	366	7.6	20.0	4	6.6	14	670	2000	200	130	74
JUL 25...	1045	384	7.5	22.0	3	6.1	12	--	1700	--	500	81
AUG 15...	1130	294	7.8	22.0	25	6.3	5.6	--	<200	--	<200	80

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 11...	28	24	6.3	19	8.6	71	0	58	2.9	--	48	27
FEB 02...	0	19	5.0	37	8.1	83	0	68	8.4	--	49	58
MAR 31...	35	26	5.9	20	7.8	66	0	54	2.7	--	44	26
MAY 18...	31	26	5.8	25	11	71	0	58	2.9	.0	53	35
JUN 16...	8	21	5.2	21	9.0	81	0	66	3.3	--	43	28
JUL 25...	1	23	5.6	27	10	98	0	80	5.0	--	40	35
AUG 15...	38	23	5.4	16	7.4	51	0	42	1.3	--	50	25

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 11...	--	179	13	--	--	--	--	7.3	--	.95	--	6.8
FEB 02...	--	228	28	--	--	--	--	12	--	1.7	--	18
MAR 31...	--	181	34	--	--	--	--	7.3	--	.72	--	--
MAY 18...	18	142	19	--	--	--	--	6.2	--	.62	--	7.1
JUN 16...	--	197	19	--	--	--	--	2.0	--	.85	--	6.0
JUL 25...	--	240	12	1.5	.26	6.3	.00	6.3	8.1	1.2	.99	6.8
AUG 15...	--	182	22	.86	.14	2.1	1.0	3.1	4.1	.82	.46	3.9

01467181 NORTH BRANCH COOPER RIVER AT ERLTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
10...	1035	10	0	220	0	0	0	140

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
10...	160	14	140	.0	40	0	60	2

01467190 COOPER RIVER AT CAMDEN, NJ

LOCATION.--Lat 39°55'35", long 75°05'03", Camden County, Hydrologic Unit 02040202, at bridge on U.S. Routes 130 and 30, 3.4 mi (5.5 km) upstream from mouth, 3.5 mi (5.6 km) northwest of Haddonfield, 3.7 mi (6.0 km) downstream from mouth of North Branch Cooper River, and 0.6 mi (1.0 km) upstream from tidal-barrier dam.

DRAINAGE AREA.--35.2 mi² (91.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1970-71, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM ,7UM-MF (COL./ 100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT 06...	1010	324	7.8	17.0	12	4.7	6.8	1800	80	--	130	53
NOV 11...	1135	322	7.7	5.5	6	7.0	3.6	432	240	822	5	66
FEB 03...	1335	590	6.9	2.0	1	4.9	8.5	8570	23	160	<2	74
APR 12...	1215	304	7.6	14.5	2	5.1	8.4	340	<2	--	9	77
MAY 19...	1130	369	7.9	22.0	10	5.7	8.1	430	330	80	22	82
JUN 16...	1345	292	8.1	23.0	3	7.8	16	270	110	80	17	52
JUL 25...	1235	339	8.9	25.5	40	12.2	--	--	330	--	20	68
AUG 15...	1315	246	7.6	26.5	25	6.2	6.6	--	2400	--	1100	52

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT 06...	0	15	3.8	21	7.7	81	0	66	2.1	--	30	29
NOV 11...	0	19	4.5	19	7.8	71	0	58	2.3	--	37	25
FEB 03...	0	21	5.3	64	9.2	95	0	78	19	--	41	99
APR 12...	27	21	6.0	21	5.7	61	0	50	2.5	--	36	30
MAY 19...	6	23	5.9	26	9.0	93	0	76	1.9	.0	36	35
JUN 16...	0	18	3.6	19	7.0	63	0	52	.8	--	28	26
JUL 25...	0	20	4.5	27	10	83	4	75	.2	--	32	35
AUG 15...	0	15	3.5	16	7.0	63	0	52	2.5	--	25	21

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	--	168	5	--	--	--	--	7.0	--	.22	--	--
NOV 11...	--	196	11	--	--	5.3	2.8	8.1	8.8	.59	--	7.0
FEB 03...	--	307	13	--	--	--	--	12	--	1.3	--	7.2
APR 12...	--	174	29	--	--	--	--	6.6	--	.39	--	15
MAY 19...	12	194	22	--	--	--	--	--	--	.20	--	7.5
JUN 16...	--	158	18	--	--	--	--	3.1	--	.29	--	4.5
JUL 25...	--	207	9	.42	.20	3.9	4.0	7.9	8.5	.50	.13	9.7
AUG 15...	--	130	17	.31	.07	4.3	2.4	6.7	7.1	.36	.17	5.4

01467190 COOPER RIVER AT CAMDEN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
19...	1130	20	1	240	0	0	0	5

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
19...	120	3	70	.0	9	0	20	0

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA

LOCATION.--Lat 39°57'11", long 75°08'05", Philadelphia County, Hydrologic Unit 02040202, at center of river on a line 200 ft (61 m) upstream of bridge from the north side of pier 12 North through channel station +14.3 to pierhead line on New Jersey side of river. Water-quality recorder (39°57'10", 75°08'18") located at river end of pier 11 North about 100 ft (30 m) downstream from bridge.

DRAINAGE AREA.--7,993 mi² (20,700 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: August 1949 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1964 to current year.
pH: October 1967 to current year.
WATER TEMPERATURES: November 1960 to current year.
DISSOLVED OXYGEN: November 1960 to current year.

REMARKS.--Samples collected approximately 5 to 15 ft (2 to 5 m) from bottom. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 384 micromhos Aug. 1; minimum, 84 micromhos Mar. 16.
pH: Maximum, 7.4 Dec. 9, 13, 14; minimum, 5.8 May 31.
WATER TEMPERATURES: Maximum, 30.0°C July 20, 22; minimum, 0.0°C Feb. 1, 2.
DISSOLVED OXYGEN: Maximum 12.5 mg/L Dec. 14; minimum 0.0 mg/L on many days in Aug., Sept. 1, 2.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,450 micromhos Nov. 20, 1964; minimum, 80 micromhos Aug. 30, 1971.
pH: Maximum, 8.1 Mar. 19, 1975; minimum, 5.6 Feb. 27, 1970.
WATER TEMPERATURES: Maximum: 31.0°C July 13-15, 1966; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 14.1 mg/L Dec. 14, 1962; minimum, 0.0 mg/L on several days during summer months.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	330	294	313	150	138	144	241	222	231	---	---	---
2	332	297	315	161	146	152	245	230	238	---	---	---
3	331	285	309	163	146	155	245	228	237	---	---	---
4	319	285	302	170	156	162	257	229	243	---	---	---
5	323	288	305	170	160	165	257	237	246	---	---	---
6	320	279	303	169	156	162	263	235	248	---	---	---
7	323	283	306	164	152	158	266	234	252	---	---	---
8	318	282	306	166	154	159	266	202	245	---	---	---
9	324	285	305	168	154	161	221	190	210	---	---	---
10	298	235	263	171	160	165	209	191	200	---	---	---
11	237	208	221	175	160	167	205	193	200	---	---	---
12	208	170	194	176	165	170	214	200	207	212	196	205
13	186	132	164	176	164	171	216	161	189	213	189	203
14	157	116	136	182	167	175	177	138	161	218	194	209
15	140	118	129	186	172	180	173	142	159	215	187	203
16	137	125	131	193	178	186	171	137	157	209	181	196
17	144	131	138	196	184	191	175	146	163	193	163	178
18	150	138	143	202	189	195	170	138	156	178	147	167
19	158	144	151	208	190	201	162	133	148	175	154	165
20	169	154	160	218	198	207	162	135	148	182	161	172
21	166	156	161	216	198	208	162	124	142	183	161	174
22	167	154	161	218	202	210	140	122	130	178	151	166
23	186	156	167	218	202	211	136	124	130	174	156	166
24	190	166	177	224	206	215	---	---	---	184	168	176
25	181	147	169	229	213	220	---	---	---	196	182	189
26	172	139	156	231	207	220	---	---	---	206	190	199
27	160	137	150	239	213	225	179	166	138	213	190	202
28	154	137	143	244	217	229	180	159	171	209	188	199
29	153	139	145	241	218	229	190	165	180	---	---	---
30	158	145	150	233	215	225	189	166	178	---	---	---
31	160	145	152	---	---	---	---	---	---	---	---	---
MONTH	332	116	204	244	138	187	266	122	189	218	147	186

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	240	194	213	211	174	195	---	---	---	167	135	148
2	223	202	212	192	154	171	---	---	---	160	134	146
3	231	204	216	174	150	160	---	---	---	152	135	146
4	245	202	224	162	145	155	---	---	---	161	141	149
5	254	214	236	160	133	148	---	---	---	163	142	154
6	229	194	214	150	133	139	118	105	111	162	146	154
7	234	198	218	147	124	139	---	---	---	163	149	156
8	229	200	220	131	111	124	---	---	---	165	154	159
9	---	---	---	123	113	119	---	---	---	183	156	169
10	---	---	---	125	115	120	---	---	---	192	172	184
11	---	---	---	128	117	123	---	---	---	195	184	189
12	---	---	---	131	121	127	146	131	138	196	179	189
13	---	---	---	152	126	132	147	133	140	192	173	183
14	---	---	---	137	124	130	146	136	141	189	176	184
15	---	---	---	138	95	117	147	137	143	191	178	184
16	---	---	---	102	84	94	153	141	146	194	167	180
17	---	---	---	106	88	97	152	142	147	181	167	176
18	---	---	---	113	96	105	161	147	154	185	165	176
19	---	---	---	120	106	111	164	153	159	187	167	178
20	---	---	---	129	109	118	167	158	163	193	170	182
21	---	---	---	150	113	127	175	165	170	188	170	181
22	326	287	309	158	126	139	187	167	176	191	171	181
23	320	282	304	144	119	132	188	174	180	191	168	182
24	361	285	313	140	129	133	190	177	184	193	174	186
25	321	258	288	139	127	134	191	180	187	204	178	192
26	261	240	250	140	129	135	194	181	188	217	193	204
27	245	217	235	144	133	137	193	181	188	220	200	210
28	230	201	213	149	136	141	197	162	188	227	201	215
29	---	---	---	165	140	147	190	136	161	233	199	217
30	---	---	---	160	147	150	174	133	150	234	206	221
31	---	---	---	---	---	---	---	---	---	234	208	222
MONTH	361	194	244	211	84	133	197	105	161	234	134	181

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	243	221	230	---	---	---	384	291	347	340	298	322
2	243	220	232	---	---	---	347	296	319	342	301	323
3	251	227	240	---	---	---	351	298	323	340	306	323
4	250	226	245	---	---	---	344	294	316	346	311	326
5	256	234	247	287	255	269	334	289	312	344	317	333
6	266	240	254	346	246	293	334	292	311	347	311	332
7	278	244	256	320	285	307	323	285	307	347	306	325
8	269	250	261	316	287	303	322	279	303	351	311	330
9	269	247	261	335	280	301	325	283	299	350	311	332
10	269	249	259	333	282	308	324	283	305	352	314	331
11	276	257	265	314	280	294	349	290	315	346	305	325
12	275	255	268	306	272	289	348	307	327	345	312	328
13	275	261	269	298	263	280	352	308	330	348	320	334
14	278	262	273	294	254	277	350	285	322	347	312	330
15	286	272	278	295	266	279	338	290	314	349	309	329
16	---	---	---	297	266	282	336	294	317	356	311	336
17	---	---	---	296	269	281	339	300	317	354	320	337
18	---	---	---	297	273	287	331	294	313	356	317	337
19	---	---	---	300	282	291	335	298	315	358	317	337
20	---	---	---	306	280	294	333	295	317	346	288	319
21	---	---	---	311	280	296	340	299	319	345	297	324
22	---	---	---	307	279	294	330	285	313	341	296	320
23	---	---	---	310	279	293	326	282	303	339	286	310
24	---	---	---	310	276	294	325	279	305	327	269	292
25	---	---	---	304	279	292	323	280	299	308	257	280
26	---	---	---	355	295	325	317	283	301	294	236	268
27	---	---	---	376	324	343	322	284	304	260	160	223
28	---	---	---	365	326	348	321	289	306	201	146	170
29	---	---	---	372	329	352	318	294	304	156	112	133
30	---	---	---	378	335	358	328	295	313	146	106	124
31	---	---	---	378	329	357	334	300	318	---	---	---
MONTH	286	220	256	378	246	303	384	279	313	358	106	301
YEAR	384	84	222									

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.7	6.5	6.6	7.1	6.9	7.0	7.1	6.8	7.0	---	---	---
2	6.7	6.5	6.6	7.1	6.9	7.0	7.1	6.8	6.9	---	---	---
3	6.8	6.5	6.7	7.1	6.9	7.0	7.2	6.9	7.1	---	---	---
4	6.8	6.6	6.7	7.1	6.9	7.0	7.2	6.9	7.0	---	---	---
5	6.8	6.6	6.7	7.0	6.9	6.9	7.2	6.8	7.0	---	---	---
6	6.9	6.6	6.7	7.0	6.9	7.0	7.1	6.7	6.9	---	---	---
7	6.8	6.6	6.7	7.0	6.9	7.0	7.1	6.7	6.8	---	---	---
8	6.8	6.6	6.7	7.1	6.9	7.0	7.2	6.8	6.9	---	---	---
9	6.8	6.6	6.7	7.1	6.9	7.0	7.4	7.0	7.2	---	---	---
10	7.0	6.7	6.9	7.1	6.9	7.0	7.3	7.0	7.1	---	---	---
11	7.0	6.9	7.0	7.0	6.9	7.0	7.2	7.0	7.1	---	---	---
12	7.0	6.8	6.9	7.0	6.8	6.9	7.1	6.9	7.0	6.8	6.5	6.7
13	6.9	6.8	6.8	7.0	6.9	7.0	7.4	6.8	7.1	6.9	6.5	6.7
14	6.8	6.7	6.7	7.0	6.9	7.0	7.4	7.2	7.3	6.8	6.5	6.6
15	6.7	6.6	6.7	7.1	6.9	7.0	7.3	7.2	7.2	6.9	6.5	6.7
16	6.8	6.6	6.7	7.1	6.9	7.0	7.3	7.0	7.2	6.9	6.6	6.7
17	6.8	6.6	6.7	7.1	6.9	7.0	7.2	7.0	7.1	6.9	6.7	6.8
18	6.8	6.6	6.7	7.1	6.9	7.0	7.2	7.0	7.1	7.0	6.7	6.8
19	6.8	6.5	6.7	7.1	6.8	7.0	7.2	7.0	7.1	7.0	6.8	6.8
20	6.8	6.5	6.7	7.1	6.8	7.0	7.2	6.9	7.0	6.9	6.7	6.8
21	6.8	6.5	6.6	7.1	6.8	6.9	7.1	6.5	6.9	7.0	6.7	6.8
22	7.0	6.7	6.8	7.1	6.8	7.0	6.8	6.5	6.6	7.0	6.8	6.9
23	7.1	6.9	7.0	7.2	6.9	7.0	---	---	---	7.0	6.8	6.9
24	7.1	7.0	7.0	7.1	6.9	7.0	---	---	---	6.9	6.7	6.8
25	7.2	6.9	6.9	7.1	6.8	7.0	---	---	---	6.9	6.7	6.8
26	6.9	6.8	6.9	7.1	6.8	7.0	---	---	---	6.9	6.7	6.8
27	6.9	6.9	6.9	7.1	6.8	7.0	7.0	6.8	6.9	6.9	6.7	6.8
28	7.0	6.9	6.9	7.1	6.8	7.0	7.1	6.7	6.9	7.0	6.8	6.9
29	7.0	6.9	7.0	7.1	6.8	6.9	7.1	6.7	6.9	---	---	---
30	7.0	6.9	7.0	7.1	6.9	7.0	7.2	6.9	7.0	---	---	---
31	7.0	6.9	6.9	---	---	---	---	---	---	---	---	---
MONTH	7.2	6.5	6.8	7.2	6.8	7.0	7.4	6.5	7.0	7.0	6.5	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.8	6.3	6.5	7.0	6.9	7.0	---	---	---	6.7	6.6	6.6
2	6.9	6.5	6.8	7.0	6.9	7.0	---	---	---	6.7	6.5	6.6
3	6.9	6.5	6.7	7.0	6.9	6.9	---	---	---	6.6	6.5	6.6
4	6.8	6.5	6.7	6.9	6.8	6.8	---	---	---	6.6	6.4	6.5
5	6.8	6.5	6.6	6.9	6.7	6.8	---	---	---	6.6	6.4	6.5
6	6.9	6.7	6.8	7.0	6.8	6.9	6.9	6.6	6.8	6.6	6.3	6.5
7	6.9	6.6	6.8	7.0	6.8	6.9	---	---	---	6.6	6.4	6.5
8	6.9	6.6	6.7	6.8	6.8	6.8	---	---	---	6.7	6.5	6.6
9	6.8	6.5	6.6	6.8	6.7	6.7	---	---	---	6.7	6.5	6.6
10	6.7	6.5	6.6	6.8	6.6	6.7	---	---	---	6.8	6.5	6.6
11	6.8	6.5	6.6	6.8	6.6	6.7	---	---	---	6.8	6.5	6.6
12	6.8	6.6	6.7	6.7	6.6	6.7	6.9	6.7	6.8	6.8	6.6	6.7
13	6.8	6.5	6.7	6.7	6.6	6.6	6.9	6.6	6.7	6.8	6.6	6.7
14	6.9	6.3	6.7	6.8	6.6	6.7	6.8	6.6	6.7	6.8	6.6	6.7
15	7.0	6.6	6.8	6.8	6.7	6.8	6.9	6.6	6.7	6.8	6.6	6.7
16	7.0	6.8	6.9	6.7	6.5	6.6	6.8	6.6	6.7	6.8	6.6	6.7
17	---	---	---	6.7	6.6	6.6	6.8	6.5	6.7	6.7	6.5	6.6
18	6.7	6.3	6.5	6.9	6.7	6.7	6.8	6.5	6.6	6.7	6.5	6.6
19	6.7	6.4	6.5	6.8	6.7	6.8	6.7	6.5	6.5	6.6	6.4	6.5
20	6.6	6.4	6.5	6.8	6.7	6.8	6.6	6.3	6.5	6.5	6.4	6.4
21	6.6	6.5	6.5	6.8	6.5	6.8	6.7	6.4	6.5	6.5	6.3	6.4
22	6.9	6.5	6.7	6.9	6.7	6.7	6.7	6.4	6.5	6.6	6.3	6.4
23	6.9	6.7	6.8	7.0	6.6	6.9	6.7	6.4	6.5	6.6	6.4	6.5
24	6.9	6.6	6.7	7.1	6.9	7.0	6.7	6.4	6.5	6.6	6.3	6.4
25	7.1	6.7	6.9	7.1	7.0	7.0	6.6	6.4	6.5	6.5	6.3	6.4
26	7.2	7.0	7.1	7.1	6.9	7.0	6.8	6.4	6.6	6.5	6.2	6.4
27	7.2	7.0	7.1	7.1	6.9	7.0	6.9	6.6	6.8	6.4	6.2	6.3
28	7.1	6.9	7.0	7.1	6.9	7.0	7.0	6.7	6.8	6.4	6.2	6.3
29	---	---	---	7.0	6.9	6.9	6.8	6.7	6.8	6.4	6.2	6.3
30	---	---	---	7.0	6.9	6.9	6.7	6.6	6.7	6.4	5.9	6.3
31	---	---	---	---	---	---	---	---	---	6.4	5.8	6.2
MONTH	7.2	6.3	6.7	7.1	6.5	6.8	7.0	6.3	6.6	6.8	5.8	6.5

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.4	6.2	6.3	---	---	---	6.9	6.7	6.8	6.7	6.5	6.6
2	6.4	6.2	6.3	---	---	---	6.9	6.7	6.8	6.7	6.5	6.6
3	6.4	6.2	6.3	---	---	---	6.9	6.7	6.8	6.7	6.6	6.6
4	6.4	6.2	6.3	---	---	---	6.8	6.6	6.8	6.7	6.5	6.6
5	6.4	6.2	6.3	6.8	6.6	6.7	6.9	6.8	6.8	6.7	6.5	6.6
6	6.4	6.2	6.3	6.8	6.6	6.7	6.9	6.8	6.8	6.7	6.5	6.6
7	6.5	6.2	6.3	6.7	6.6	6.7	6.9	6.8	6.8	6.7	6.6	6.7
8	6.5	6.3	6.4	6.8	6.7	6.7	6.9	6.7	6.8	6.7	6.6	6.7
9	6.5	6.3	6.4	6.8	6.7	6.7	6.8	6.7	6.8	6.7	6.5	6.7
10	6.5	6.2	6.4	6.8	6.7	6.8	6.9	6.7	6.8	6.7	6.6	6.7
11	6.6	6.3	6.4	6.8	6.7	6.8	6.8	6.4	6.7	6.8	6.6	6.7
12	6.6	6.4	6.5	6.8	6.8	6.8	6.7	6.5	6.6	6.8	6.6	6.7
13	6.6	6.4	6.5	6.9	6.8	6.8	6.7	6.5	6.6	6.8	6.6	6.7
14	6.6	6.4	6.5	6.9	6.8	6.9	6.7	6.5	6.6	6.8	6.6	6.7
15	6.7	6.4	6.6	6.9	6.8	6.9	6.7	6.5	6.6	6.8	6.6	6.7
16	---	---	---	6.9	6.9	6.9	6.7	6.5	6.6	6.8	6.6	6.7
17	---	---	---	6.9	6.9	6.9	6.7	6.4	6.6	6.8	6.6	6.7
18	---	---	---	6.9	6.9	6.9	6.7	6.6	6.6	6.8	6.6	6.7
19	---	---	---	6.9	6.9	6.9	6.7	6.5	6.6	6.8	6.6	6.7
20	---	---	---	6.9	6.9	6.9	6.7	6.5	6.6	6.7	6.6	6.7
21	---	---	---	6.9	6.9	6.9	6.7	6.5	6.6	6.8	6.6	6.7
22	---	---	---	6.9	6.9	6.9	6.7	6.4	6.6	6.8	6.6	6.7
23	---	---	---	6.9	6.8	6.9	6.7	6.5	6.6	6.8	6.6	6.7
24	---	---	---	6.9	6.8	6.9	6.7	6.5	6.6	6.8	6.7	6.7
25	---	---	---	6.9	6.8	6.9	6.7	6.5	6.7	6.8	6.7	6.8
26	---	---	---	7.0	6.8	6.9	6.7	6.5	6.7	6.9	6.7	6.8
27	---	---	---	7.0	6.8	6.9	6.7	6.5	6.6	6.9	6.8	6.9
28	---	---	---	6.9	6.8	6.9	6.7	6.5	6.6	6.9	6.8	6.9
29	---	---	---	6.9	6.8	6.8	6.7	6.6	6.7	6.9	6.8	6.8
30	---	---	---	6.9	6.7	6.8	6.7	6.2	6.6	6.8	6.7	6.7
31	---	---	---	6.9	6.7	6.8	6.7	6.5	6.6	---	---	---
MONTH	6.7	6.2	6.4	7.0	6.6	6.8	6.9	6.2	6.7	6.9	6.5	6.7
YEAR	7.4	5.8	6.8									

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.5	20.0	20.0	9.0	8.5	8.5	5.5	5.0	5.5	---	---	---
2	20.0	19.5	19.5	8.5	8.0	8.5	5.5	5.0	5.5	---	---	---
3	19.5	19.0	19.5	8.5	7.5	8.0	5.0	4.5	5.0	---	---	---
4	19.5	19.0	19.0	8.5	8.0	8.0	5.0	4.0	4.5	---	---	---
5	19.0	18.5	19.0	8.5	8.0	8.5	5.0	4.0	4.5	---	---	---
6	19.0	18.5	19.0	8.0	8.0	8.0	5.0	4.0	4.5	---	---	---
7	19.0	18.5	19.0	8.0	7.5	8.0	5.5	4.5	5.0	---	---	---
8	19.0	18.5	19.0	8.0	7.0	7.5	5.0	4.0	5.0	---	---	---
9	19.0	18.5	19.0	7.5	7.0	7.5	4.5	3.5	4.5	---	---	---
10	19.0	17.0	18.0	7.5	7.0	7.0	4.5	3.5	4.0	---	---	---
11	17.0	16.5	16.5	7.0	7.0	7.0	4.0	3.0	3.5	---	---	---
12	16.5	15.5	16.0	7.0	6.5	7.0	3.5	3.0	3.5	1.0	1.0	1.0
13	16.0	14.5	15.5	6.5	6.0	6.5	3.5	2.0	3.0	1.0	0.5	1.0
14	15.0	14.0	14.5	6.5	6.0	6.0	3.0	1.5	2.5	1.0	0.5	1.0
15	14.5	13.5	14.0	6.5	5.5	6.0	3.0	1.5	2.5	1.5	0.5	1.0
16	14.0	13.5	13.5	6.5	6.0	6.0	3.0	1.5	2.5	1.0	0.5	1.0
17	13.5	13.0	13.5	6.5	6.0	6.0	3.0	2.0	2.5	1.0	0.5	1.0
18	13.5	13.0	13.0	6.5	6.0	6.0	3.0	2.0	2.5	1.0	1.0	1.0
19	13.0	12.5	13.0	6.5	5.5	6.0	3.0	2.0	2.5	1.5	1.0	1.0
20	13.5	12.5	13.0	6.5	6.0	6.0	3.0	2.5	3.0	1.5	1.0	1.0
21	13.0	12.5	13.0	6.0	5.5	6.0	3.5	2.0	3.0	1.5	1.0	1.0
22	12.5	11.5	12.0	6.0	5.5	6.0	3.0	2.0	2.5	2.0	1.0	1.0
23	11.5	10.5	11.0	6.0	5.5	6.0	---	---	---	1.0	1.0	1.0
24	11.0	10.0	10.5	5.5	5.5	5.5	---	---	---	1.0	1.0	1.0
25	10.5	10.0	10.0	5.5	5.0	5.5	---	---	---	1.5	1.0	1.0
26	10.0	9.5	10.0	5.5	5.0	5.5	---	---	---	1.5	1.0	1.0
27	9.5	9.0	9.5	5.5	5.5	5.5	2.0	1.5	1.5	1.5	1.0	1.0
28	9.0	9.0	9.0	6.0	5.5	5.5	1.5	1.5	1.5	1.5	1.0	1.0
29	9.0	9.0	9.0	6.0	5.5	5.5	2.0	1.5	1.5	---	---	---
30	9.0	8.5	9.0	6.0	5.5	5.5	1.5	1.0	1.5	---	---	---
31	9.0	9.0	9.0	---	---	---	---	---	---	---	---	---
MONTH	20.5	8.5	14.5	9.0	5.0	6.5	5.5	1.0	3.5	2.0	0.5	1.0

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA.--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.0	0.0	6.0	5.0	5.5	---	---	---	15.0	14.0	14.5
2	1.0	0.0	0.5	5.5	5.0	5.5	---	---	---	15.0	14.5	14.5
3	1.0	0.5	1.0	5.5	5.0	5.0	---	---	---	15.5	14.5	15.0
4	1.0	0.5	1.0	5.5	5.0	5.0	---	---	---	15.5	15.0	15.0
5	1.0	0.5	1.0	5.5	5.0	5.5	---	---	---	16.0	15.0	15.5
6	1.0	0.5	0.5	5.5	5.0	5.5	9.0	8.5	8.5	16.5	15.5	16.0
7	1.0	0.5	1.0	6.0	5.5	5.5	---	---	---	17.0	16.5	17.0
8	1.0	1.0	1.0	6.0	5.5	5.5	---	---	---	17.5	16.5	17.0
9	1.0	0.5	1.0	6.0	5.5	5.5	---	---	---	17.5	16.5	17.0
10	1.0	1.0	1.0	6.5	6.0	6.0	---	---	---	17.0	16.0	16.5
11	1.0	0.5	1.0	7.0	6.5	6.5	---	---	---	16.5	16.0	16.5
12	1.0	1.0	1.0	7.5	6.5	7.0	10.0	9.5	10.0	17.0	16.5	16.5
13	1.5	0.5	1.0	8.5	7.5	8.0	11.0	10.0	10.5	17.5	16.5	17.0
14	1.5	0.0	1.5	10.0	8.5	9.5	12.0	11.0	11.0	17.5	17.0	17.0
15	2.0	1.5	1.5	10.5	9.0	10.0	12.5	11.5	12.0	17.5	17.0	17.0
16	2.0	1.5	1.5	9.5	8.0	8.5	13.5	12.0	12.5	17.5	17.0	17.5
17	---	---	---	8.0	7.5	8.0	14.0	12.5	13.5	18.0	17.5	17.5
18	2.0	1.5	2.0	8.0	8.0	8.0	15.0	13.0	14.0	19.0	18.0	18.5
19	2.0	1.5	2.0	8.0	8.0	8.0	15.5	14.0	15.0	19.5	18.5	19.0
20	2.5	2.0	2.0	8.0	7.5	7.5	16.0	14.0	15.5	20.0	19.0	19.5
21	2.5	2.0	2.5	7.5	7.0	7.5	16.5	15.5	16.0	20.5	19.5	20.0
22	3.0	2.0	2.5	8.0	7.0	7.5	17.0	16.0	16.5	21.0	20.0	20.5
23	3.5	3.0	3.0	7.0	6.0	6.5	17.5	17.0	17.5	22.0	20.5	21.5
24	4.0	3.0	3.5	6.5	6.0	6.5	17.5	17.0	17.5	22.5	21.5	22.0
25	4.5	4.0	4.0	6.0	5.5	6.0	17.5	17.0	17.5	22.5	22.0	22.0
26	5.0	4.0	4.5	6.0	5.5	5.5	17.5	16.5	17.0	23.5	22.0	22.5
27	6.0	5.0	5.5	6.0	5.5	5.5	17.5	17.0	17.0	23.5	22.5	23.0
28	6.0	5.5	5.5	6.5	5.5	6.0	17.5	15.5	17.0	24.0	23.0	23.5
29	---	---	---	7.5	6.0	6.5	16.5	14.0	15.5	23.5	23.0	23.0
30	---	---	---	7.5	7.0	7.5	15.5	13.5	14.5	23.0	20.5	22.5
31	---	---	---	---	---	---	---	---	---	23.0	21.0	22.5
MONTH	6.0	0.0	2.0	10.5	5.0	6.5	17.5	8.5	14.5	24.0	14.0	18.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	22.5	23.0	---	---	---	27.5	26.5	27.0	27.0	27.0	27.0
2	23.5	23.0	23.0	---	---	---	27.0	26.5	27.0	27.5	27.0	27.5
3	23.0	23.0	23.0	---	---	---	27.0	27.0	27.0	27.5	27.0	27.5
4	23.0	22.5	23.0	---	---	---	27.5	27.0	27.5	27.5	27.0	27.5
5	23.0	22.5	23.0	26.5	26.5	26.5	27.5	27.0	27.5	27.5	27.0	27.0
6	23.0	22.5	22.5	27.0	26.5	26.5	28.0	27.5	27.5	27.5	27.0	27.5
7	22.5	22.0	22.0	27.0	26.5	27.0	28.0	27.5	28.0	27.5	27.0	27.0
8	22.0	21.5	22.0	27.0	26.5	27.0	28.5	28.0	28.0	27.0	26.5	27.0
9	22.0	21.5	21.5	27.5	27.0	27.0	28.5	28.0	28.0	27.0	26.5	26.5
10	21.5	21.0	21.0	27.5	27.0	27.5	28.5	28.0	28.5	26.5	26.0	26.5
11	21.0	21.0	21.0	27.5	27.0	27.0	28.5	28.0	28.5	26.0	25.5	26.0
12	21.0	20.5	21.0	27.5	27.0	27.0	29.0	28.5	28.5	25.5	25.0	25.5
13	22.0	21.0	21.5	27.5	27.0	27.5	28.5	28.5	28.5	25.5	25.0	25.0
14	22.0	21.5	22.0	28.0	27.5	27.5	28.5	27.5	28.0	25.0	24.5	25.0
15	22.5	21.5	22.0	28.5	27.5	28.0	28.0	28.0	28.0	24.5	24.5	24.5
16	---	---	---	28.5	28.0	28.5	28.5	28.0	28.0	24.5	24.0	24.0
17	---	---	---	29.0	28.5	28.5	28.0	28.0	28.0	24.5	24.0	24.0
18	---	---	---	29.5	28.5	29.0	28.0	27.5	27.5	24.5	24.0	24.0
19	---	---	---	29.5	29.0	29.5	27.5	27.0	27.5	24.5	24.0	24.5
20	---	---	---	29.5	29.0	29.5	27.0	27.0	27.0	24.5	24.5	24.5
21	---	---	---	30.0	29.5	29.5	27.0	26.5	27.0	24.5	24.0	24.5
22	---	---	---	30.0	29.5	29.5	26.5	26.0	26.5	24.0	24.0	24.0
23	---	---	---	29.5	29.0	29.0	26.5	26.5	26.5	24.0	23.5	23.5
24	---	---	---	29.0	29.0	29.0	26.5	26.0	26.5	23.5	23.0	23.5
25	---	---	---	29.0	28.0	28.5	26.5	26.0	26.0	23.5	22.5	23.0
26	---	---	---	28.5	28.0	28.0	26.0	26.0	26.0	23.0	22.0	22.5
27	---	---	---	28.0	27.5	27.5	26.0	26.0	26.0	22.5	20.5	22.0
28	---	---	---	28.0	27.5	27.5	26.5	26.0	26.0	21.5	19.5	20.5
29	---	---	---	28.0	27.5	27.5	26.5	26.0	26.5	19.5	17.5	18.5
30	---	---	---	27.5	27.5	27.5	27.0	26.5	26.5	19.0	17.5	18.0
31	---	---	---	27.5	27.0	27.5	27.0	26.5	27.0	---	---	---
MONTH	23.5	20.5	22.0	30.0	26.5	28.0	29.0	26.0	27.5	27.5	17.5	24.5
YEAR	30.0	0.0	14.5									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	2.5	0.8	1.3	9.7	8.4	9.1	8.2	6.0	6.9	---	---	---
2	2.9	0.8	1.5	9.8	8.7	9.2	7.6	5.9	6.7	---	---	---
3	3.4	1.0	1.8	9.8	8.7	9.2	8.6	6.5	7.5	---	---	---
4	4.7	1.8	3.0	9.5	8.3	8.9	8.6	6.1	7.1	---	---	---
5	4.8	1.5	2.6	9.0	8.2	8.6	8.3	5.9	6.9	---	---	---
6	5.2	1.4	2.7	9.3	8.2	8.7	8.2	5.9	6.8	---	---	---
7	4.8	1.1	2.4	9.5	8.5	8.9	7.8	5.6	6.3	---	---	---
8	3.8	0.9	2.0	9.4	8.5	9.0	8.4	5.6	6.5	---	---	---
9	2.9	0.6	1.3	9.4	8.4	8.9	10.3	7.2	8.3	---	---	---
10	4.9	1.5	3.3	9.1	8.3	8.7	10.9	8.4	9.7	---	---	---
11	5.3	4.8	5.0	9.2	8.0	8.5	11.8	10.0	10.9	---	---	---
12	6.2	4.8	5.4	9.1	7.6	8.3	12.2	9.3	10.5	10.5	9.1	9.6
13	6.8	5.4	5.8	9.0	7.8	8.4	12.1	9.8	10.9	10.9	8.7	9.7
14	7.2	5.6	6.3	9.0	7.8	8.4	12.5	10.4	11.2	9.9	8.1	8.8
15	7.4	5.8	6.5	9.3	7.7	8.4	12.0	10.3	11.1	9.7	7.8	8.5
16	7.5	5.9	6.8	8.9	7.4	8.2	12.0	9.7	10.7	9.0	7.5	8.2
17	7.1	5.6	6.4	9.0	7.2	8.0	11.1	9.2	10.1	10.1	7.8	8.7
18	7.1	5.7	6.4	8.7	7.1	7.9	11.4	9.2	10.2	9.7	7.5	8.4
19	7.1	5.4	6.2	8.8	6.9	7.7	11.5	9.4	10.3	9.0	7.2	7.9
20	6.5	4.8	5.6	8.5	6.9	7.6	11.1	9.3	10.1	8.0	6.2	7.0
21	6.5	4.7	5.5	8.5	6.8	7.5	10.9	8.8	10.0	---	---	---
22	7.8	5.4	6.5	8.9	7.0	7.8	11.0	9.1	9.9	---	---	---
23	8.1	7.0	7.6	9.1	7.6	8.2	10.1	9.1	9.5	---	---	---
24	8.1	7.4	7.7	8.8	7.5	8.1	---	---	---	---	---	---
25	8.1	7.1	7.5	8.6	7.0	7.7	---	---	---	---	---	---
26	8.6	7.1	7.8	8.7	6.9	7.6	---	---	---	---	---	---
27	8.9	8.0	8.5	8.6	6.7	7.5	10.3	9.1	9.6	---	---	---
28	9.1	8.5	8.8	8.3	6.4	7.3	10.5	8.8	9.4	---	---	---
29	9.1	8.5	8.8	8.2	6.3	7.1	10.2	8.3	9.0	---	---	---
30	8.9	8.0	8.5	8.2	6.3	7.2	10.6	8.6	9.3	---	---	---
31	8.8	7.9	8.4	---	---	---	---	---	---	---	---	---
MONTH	9.1	0.6	5.4	9.8	6.3	8.2	12.5	5.6	9.1	10.9	6.2	8.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.1	6.3	7.7	11.4	9.5	10.2	---	---	---	7.3	5.1	6.2
2	7.7	5.7	6.9	11.5	10.1	10.9	---	---	---	7.0	5.3	6.2
3	6.9	4.3	5.6	11.4	10.2	10.8	---	---	---	6.7	5.4	6.0
4	7.1	3.7	5.0	11.5	9.9	10.6	---	---	---	6.6	4.5	5.3
5	7.1	3.2	4.3	12.0	9.8	10.9	---	---	---	6.1	4.0	4.8
6	9.0	4.5	6.4	12.0	11.2	11.7	10.4	10.2	10.3	5.8	3.6	4.6
7	7.8	4.3	5.8	11.9	11.3	11.5	---	---	---	6.2	3.4	4.5
8	7.7	3.4	5.0	12.0	11.3	11.5	---	---	---	5.9	3.7	4.8
9	5.4	2.4	3.6	11.7	11.0	11.3	---	---	---	6.0	4.2	5.4
10	5.5	1.7	3.1	11.6	10.8	11.1	---	---	---	6.0	4.7	5.4
11	5.7	1.4	3.0	11.4	10.4	10.8	---	---	---	5.8	4.2	4.8
12	5.7	1.7	3.2	11.2	10.1	10.5	10.2	9.4	9.8	5.8	3.8	4.7
13	6.0	1.6	3.2	10.9	9.7	10.2	10.1	8.7	9.5	6.3	4.0	4.9
14	6.6	2.1	4.0	10.5	9.7	10.1	9.5	8.2	9.0	6.3	4.1	5.0
15	8.8	2.7	5.2	10.4	9.9	10.0	9.4	7.5	8.4	6.4	4.1	5.2
16	9.3	4.7	6.6	10.4	9.7	10.0	8.5	6.8	7.7	6.8	4.2	5.5
17	---	---	---	10.5	10.1	10.3	8.3	6.3	7.3	6.4	4.7	5.5
18	8.3	4.9	6.5	10.5	9.8	10.1	7.7	5.8	6.7	5.9	4.5	5.0
19	8.2	4.3	6.0	10.2	9.7	10.0	6.8	5.1	5.8	4.8	3.0	3.7
20	7.7	4.1	5.7	10.3	9.5	9.8	5.9	4.3	5.0	3.8	1.8	2.6
21	7.9	4.6	6.0	10.3	9.5	9.9	5.5	3.7	4.3	4.5	1.6	2.7
22	8.6	5.3	6.6	10.3	9.3	9.8	5.0	2.9	3.7	5.2	1.7	3.2
23	8.9	5.3	6.8	10.9	10.1	10.6	5.3	2.4	3.4	5.6	2.1	3.5
24	8.3	4.5	6.0	10.9	10.4	10.6	4.5	2.0	3.0	5.0	1.9	2.9
25	11.1	4.7	7.7	11.1	10.6	10.9	3.7	1.6	2.7	3.7	1.1	2.0
26	12.0	10.0	11.0	11.1	10.6	10.8	6.0	1.9	3.6	3.0	0.5	1.4
27	11.6	10.4	11.0	11.2	10.4	10.7	6.4	4.1	5.1	1.9	0.2	0.7
28	10.5	9.8	10.7	11.0	10.2	10.6	7.1	4.3	5.5	1.7	0.1	0.5
29	---	---	---	10.8	10.0	10.5	7.5	5.4	6.2	2.2	0.1	0.8
30	---	---	---	10.5	10.2	10.3	7.5	5.4	6.2	1.9	0.2	0.8
31	---	---	---	---	---	---	---	---	---	1.4	0.2	0.6
MONTH	12.0	1.4	6.0	12.0	9.3	10.6	10.4	1.6	6.2	7.3	0.1	3.8

01467200 DELAWARE RIVER AT BENJAMIN FRANKLIN BRIDGE, AT PHILADELPHIA, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1.7	0.1	0.7	---	---	---	2.8	0.5	1.3	0.5	.0	0.1
2	1.0	0.1	0.3	---	---	---	2.3	0.3	0.8	3.2	.0	0.8
3	0.8	0.1	0.2	---	---	---	1.1	0.4	0.5	3.0	0.3	1.0
4	0.9	0.1	0.3	---	---	---	2.3	0.7	1.4	4.3	0.3	2.1
5	1.0	0.1	0.4	1.3	0.3	0.7	3.7	0.6	1.7	3.3	0.2	2.3
6	0.4	0.1	0.2	1.6	0.2	0.5	5.0	0.6	1.8	2.5	0.1	0.8
7	0.6	0.1	0.3	0.3	0.2	0.2	4.5	0.6	2.3	0.8	0.1	0.2
8	0.9	0.1	0.4	0.6	0.2	0.3	2.3	0.6	1.2	0.7	0.1	0.3
9	1.1	0.1	0.4	0.6	0.2	0.3	1.8	0.1	0.8	1.0	0.1	0.4
10	1.0	0.1	0.4	1.4	0.2	0.7	1.8	.0	0.5	0.6	0.1	0.3
11	1.5	0.2	0.7	1.1	0.3	0.7	1.5	.0	0.5	0.9	0.1	0.4
12	1.5	0.3	0.7	0.7	0.2	0.4	0.9	.0	0.3	1.1	0.2	0.6
13	3.7	0.3	1.4	1.0	0.2	0.4	0.6	.0	0.1	1.3	0.3	0.7
14	3.3	0.5	1.1	1.3	0.2	0.5	1.9	.0	0.1	1.3	0.5	0.9
15	---	---	---	1.3	0.2	0.5	1.1	.0	0.3	1.1	0.3	0.6
16	---	---	---	1.5	0.2	0.6	1.4	.0	0.2	0.6	0.1	0.3
17	---	---	---	2.0	0.3	1.0	0.7	.0	0.2	0.4	0.1	0.2
18	---	---	---	2.5	0.6	1.2	1.0	.0	0.2	0.6	0.1	0.3
19	---	---	---	1.7	0.4	1.0	1.3	.0	0.5	0.7	0.1	0.3
20	---	---	---	0.8	0.2	0.5	1.1	.0	0.6	0.8	0.1	0.3
21	---	---	---	1.1	0.2	0.6	1.9	.0	1.2	0.5	0.1	0.2
22	---	---	---	1.9	0.2	0.9	2.6	0.3	1.1	0.4	0.1	0.1
23	---	---	---	2.1	0.3	1.1	1.1	0.1	0.4	0.9	0.1	0.2
24	---	---	---	3.8	0.3	1.7	0.8	.0	0.1	1.1	0.1	0.4
25	---	---	---	3.8	1.4	2.3	0.7	.0	0.2	1.5	0.2	0.8
26	---	---	---	3.1	0.7	1.7	1.4	.0	0.4	2.5	0.6	1.1
27	---	---	---	2.5	0.5	1.3	1.5	.0	0.4	4.1	1.3	2.3
28	---	---	---	1.9	0.3	1.1	1.5	.0	0.6	---	---	---
29	---	---	---	2.0	0.3	0.9	1.9	.0	1.0	---	---	---
30	---	---	---	1.0	0.3	0.5	1.8	0.2	0.8	---	---	---
31	---	---	---	2.1	0.3	0.9	1.1	.0	0.4	---	---	---
MONTH	3.7	0.1	0.5	3.8	0.2	0.8	5.0	.0	0.7	4.3	.0	0.7
YEAR	12.5	.0	5.0									

01467329 SOUTH BRANCH BIG TIMBER CREEK AT BLACKWOOD, NJ

LOCATION.--Lat 39°48'05", long 75°04'27", Gloucester County, Hydrologic Unit 02040202, at bridge on Blackwood-Clementon Road, at Blackwood Lake, and 2.0 mi (3.2 km) northeast of Fairview.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
OCT 06...	0845	130	7.1	16.0	5	6.7	1.6	220	<20	--	<20	34
NOV 10...	0920	111	7.3	5.0	4	10.8	1.4	B56	--	92	--	39
FEB 01...	1100	197	7.0	.0	4	13.0	--	E2	11	82	<2	42
APR 06...	1010	120	7.2	9.5	8	9.6	2.8	B310	200	220	350	36
MAY 16...	1045	128	7.6	17.0	7	9.5	2.2	310	--	200	79	39
JUN 15...	1000	119	7.4	20.5	1	5.1	3.9	B2400	27	7000	80	36
JUL 21...	1020	129	7.7	26.5	2	3.0	2.2	--	230	--	<20	37
AUG 16...	1010	124	7.6	23.5	5	4.3	2.0	--	700	--	79	36

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT 06...	10	9.9	2.3	5.8	2.8	29	0	24	3.7	12	11
NOV 10...	17	11	2.7	6.0	2.7	27	0	22	2.2	14	9.5
FEB 01...	21	12	2.9	16	2.9	25	0	21	4.0	16	25
APR 06...	16	10	2.6	6.1	2.3	24	0	20	2.4	15	9.1
MAY 16...	15	11	2.7	6.3	2.5	29	0	24	1.2	12	9.4
JUN 15...	22	10	2.7	5.6	2.3	17	0	14	1.1	12	8.9
JUL 21...	0	10	2.8	6.5	2.5	46	0	38	1.5	11	9.8
AUG 16...	8	10	2.7	5.5	2.4	34	0	28	1.4	12	8.7

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 06...	72	8	--	--	--	--	1.1	--	.11	--	4.1
NOV 10...	84	1	--	--	--	--	1.4	--	.10	--	2.6
FEB 01...	100	1	--	--	--	--	1.5	--	.14	--	--
APR 06...	82	7	--	--	--	--	1.3	--	.12	--	--
MAY 16...	87	0	--	--	--	--	1.1	--	.14	--	6.7
JUN 15...	--	3	--	--	--	--	1.1	--	.29	--	6.4
JUL 21...	64	21	.62	.04	.31	.51	.82	1.5	.27	.05	5.9
AUG 16...	77	7	.73	.07	.31	.49	.80	1.6	.15	.10	5.9

01467348 NORTH BRANCH BIG TIMBER CREEK AT BERLIN ROAD AT CLEMENTON, NJ

LOCATION.--Lat 39°48'19", long 74°59'21", Camden County, Hydrologic Unit 02040202, at bridge on Berlin Road, 0.1 mi (0.1 km) downstream from outflow of Clementon Lake, and 1.3 mi (2.1 km) northwest of Sharps Corner.

DRAINAGE AREA.--2.97 mi² (7.69 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 09...	0945	70	7.1	5.0	3	12.6	1.7	856000	1100	8633	330	19
JAN 26...	1000	120	6.5	1.5	3	16.0	1.5	817	<20	812	<2	20
APR 05...	1005	82	6.5	9.0	15	7.0	2.1	400	170	82200	1600	23
MAY 17...	0920	100	7.3	10.5	5	9.0	2.3	230	49	380	110	29
JUN 08...	1030	85	7.1	18.0	10	9.0	2.3	150	8	570	130	22
JUL 06...	0935	83	7.4	27.0	1	8.1	1.8	--	490	--	23	23
AUG 10...	1010	73	7.3	27.0	1	7.8	1.8	--	920	--	1600	21

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 09...	9	4.8	1.6	4.1	2.0	12	0	10	1.5	14	6.0
JAN 26...	13	4.6	2.0	8.4	2.1	8	0	7	4.0	13	13
APR 05...	17	6.0	2.0	4.4	2.1	7	0	6	3.5	15	6.1
MAY 17...	15	7.8	2.3	6.0	2.4	17	0	14	1.4	17	8.9
JUN 08...	12	5.7	2.0	4.8	2.0	12	0	10	1.5	14	7.1
JUL 06...	11	5.9	2.0	4.3	1.6	15	0	12	1.0	12	7.1
AUG 10...	9	5.1	2.1	4.3	2.0	15	0	12	1.2	10	6.5

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 09...	48	5	--	--	--	--	1.4	--	.02	--	2.7
JAN 26...	57	6	--	--	--	--	1.4	--	.06	--	1.8
APR 05...	50	18	--	--	--	--	2.0	--	.07	--	--
MAY 17...	57	9	--	--	--	--	1.1	--	.04	--	5.9
JUN 08...	62	8	--	--	--	--	1.4	--	.05	--	5.2
JUL 06...	43	7	.01	.00	.02	.47	.49	.50	.05	.00	5.8
AUG 10...	51	10	.05	.00	.02	.39	.41	.46	.03	.00	5.4

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ

LOCATION.--Lat 39°50'04", long 75°04'02", Camden County, Hydrologic Unit 02040202, at bridge on State Route 168 in Glendora, 1.6 mi (2.6 km) north of Mechanicsville, and 1.0 mi (1.6 km) southeast of Clements Bridge.

DRAINAGE AREA.--18.8 mi^2 (48.7 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV 10...	0820	211	7.4	5.0	5	7.4	3.8	B120	--	B440	--	51
FEB 01...	0945	310	7.3	1.0	12	11.6	--	B1000	920	380	1600	52
APR 06...	0920	160	7.4	8.5	15	8.8	5.3	3000	2400	1000	540	47
MAY 16...	0945	234	7.0	15.0	25	4.8	8.1	550	110	7300	200	77
JUN 15...	0900	192	7.1	19.5	15	3.3	--	4000	200	E27000	7900	51
JUL 21...	0930	254	7.9	25.5	1	1.0	6.0	--	1100	--	110	54
AUG 16...	0920	216	7.3	22.0	9	1.1	6.7	--	1300	--	240	47

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV 10...	9	15	3.2	14	4.8	51	0	42	3.2	--	24	13
FEB 01...	2	16	3.0	28	5.6	61	0	50	4.9	--	25	34
APR 06...	8	14	2.8	9.9	3.6	48	0	39	3.1	--	22	12
MAY 16...	27	23	4.8	16	5.0	61	0	50	9.8	.0	23	15
JUN 15...	9	16	2.7	14	4.6	51	0	42	6.5	--	19	12
JUL 21...	0	16	3.3	18	6.2	74	0	61	1.5	--	21	17
AUG 16...	3	14	3.0	14	5.3	54	0	44	4.3	--	23	13

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	81	10	--	--	--	--	3.1	--	.65	--	4.2
FEB 01...	--	157	5	--	--	--	--	6.4	--	.78	--	--
APR 06...	--	127	35	--	--	--	--	1.4	--	.42	--	--
MAY 16...	9.4	145	54	--	--	--	--	1.5	--	.70	--	7.1
JUN 15...	--	112	45	--	--	--	--	2.0	--	.75	--	6.0
JUL 21...	--	135	17	.64	.20	2.9	1.1	4.0	4.8	.72	.30	6.2
AUG 16...	--	122	36	.74	.24	1.5	.60	2.1	3.1	.91	.52	6.1

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 16...	0945	30	1	430	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 16...	280	14	90	.0	13	0	50	0

01467369 ALMONESSON CREEK AT RUNNEMEDE, NJ

LOCATION.--Lat 39°50'44", long 75°05'43", Gloucester County, Hydrologic Unit 02040202, at bridge on State Route 42, 0.7 mi (1.1 km) south of State Route 42 overpass and NJ Turnpike, and 0.7 mi (1.1 km) northwest of Clements Bridge.

DRAINAGE AREA.--3.79 mi^2 (9.82 km^2).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM ,7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
OCT 05...	0900	219	7.4	17.0	10	3.1	5.1	87600	20	--	200	55
NOV 09...	0830	218	7.2	2.0	8	10.2	3.0	8290000	80	16000	5400	57
JAN 26...	0830	342	7.3	.0	9	10.0	6.1	8110	220	1200	170	61
APR 05...	0915	146	6.9	9.5	10	6.8	4.0	390	130	9400	>2400	41
MAY 17...	0815	232	7.3	16.5	9	5.4	6.7	640	220	1500	200	58
JUN 08...	0930	277	7.3	17.5	10	5.0	3.5	1600	<200	20000	330	70
JUL 06...	0840	334	7.8	25.5	1	1.8	3.9	--	3500	--	79	93
AUG 10...	0915	267	7.4	27.0	2	1.8	5.1	--	310	--	230	64

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 05...	11	15	4.2	15	4.6	54	0	44	3.4	31	18
NOV 09...	17	14	5.4	13	6.0	49	0	40	4.9	21	18
JAN 26...	3	18	4.0	31	5.8	71	0	58	5.7	28	42
APR 05...	16	11	3.3	10	3.4	30	0	25	6.0	21	13
MAY 17...	16	16	4.4	15	4.8	51	0	42	4.1	23	20
JUN 08...	30	19	5.5	18	3.9	49	0	40	3.9	50	21
JUL 06...	49	26	6.7	20	4.2	54	0	44	1.4	51	25
AUG 10...	0	18	4.7	20	7.4	81	0	66	5.2	29	22

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 05...	126	39	--	--	--	--	2.0	--	.49	--	6.9
NOV 09...	122	17	--	--	--	--	2.0	--	.33	--	2.8
JAN 26...	177	5	--	--	--	--	5.9	--	.65	--	5.8
APR 05...	86	10	--	--	--	--	2.5	--	.20	--	--
MAY 17...	127	21	--	--	--	--	2.2	--	.11	--	7.0
JUN 08...	157	20	--	--	--	--	2.0	--	.12	--	4.9
JUL 06...	179	19	.72	.09	2.1	.80	2.9	3.7	.25	.10	6.4
AUG 10...	355	19	.47	.10	2.3	1.9	4.2	4.8	.44	.26	5.3

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'00", long 75°11'20", Philadelphia County, PA, Hydrologic Unit 02040203, on right bank 150 ft (46 m) upstream from Fairmount Dam, 1,500 ft (457 m) upstream from Spring Garden Street Bridge, in Philadelphia, and 8.7 mi (14.0 km) upstream from mouth.

DRAINAGE AREA.--1,893 mi² (4,903 km²).

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: September 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 241, 261, 281, 301, 381, have been found to be unreliable and should not be used.
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1945 to current year.
DISSOLVED OXYGEN: January 1966 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Water-quality recorder located at Belmont raw-water pumping station on west side of river near Columbia Bridge. Datum of gage is 5.74 ft (1.750 m) NGVD. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956 to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft (12 m) upstream from Fairmount Dam at same datum.

REMARKS.--Records good. Some regulation by reservoirs above station. Records of daily discharge do not include diversion above station by city of Philadelphia for municipal water supply.

AVERAGE DISCHARGE.--46 years, 2,910 ft³/s (82.41 m³/s), 20.87 in/yr (530 mm/yr), adjusted for diversion.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 18,000 ft³/s (510 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0515	25800	731	9.34	2.847	Mar. 23	0015	*39200	1110	10.55	3.216
Mar. 14	0515	30500	864	9.79	2.984	Apr. 5	1145	34100	966	10.12	3.085

Minimum discharge, 280 ft³/s (7.93 m³/s) Sept. 14, gage height 5.70 ft (1.737 m); minimum daily, 315 ft³/s (8.92 m³/s) Sept. 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 23, 1972, gage height, 14.65 ft (4.465 m); no flow over dam at times; minimum daily, 0.6 ft³/s (0.02 m³/s) Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 17.0 ft (5.18 m) Oct. 4, 1896, discharge, 135,000 ft³/s (3,820 m³/s), from rating curve extended above 46,000 ft³/s (1,300 m³/s). Flood of Mar. 1, 1902, reached a stage of 14.8 ft (4.511 m), discharge, 98,000 ft³/s (2,780 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	6710	1140	672	460	5020	3220	2980	891	858	746	966
2	1770	5020	1040	749	455	3910	3310	2680	1300	731	1170	642
3	2640	4230	930	825	500	3210	9570	2500	949	631	887	460
4	4330	3800	917	982	579	3420	8160	2400	849	586	987	477
5	3530	3460	864	965	624	14600	23400	3060	786	547	1170	582
6	2690	3100	879	896	597	13000	16000	3630	803	551	813	612
7	2280	2810	3050	889	466	8360	10500	3790	1040	846	861	539
8	2030	2580	8500	836	510	6150	8220	3410	1050	1230	903	438
9	4280	2340	4600	777	545	4650	6680	2780	1220	967	744	390
10	14700	2140	3110	1360	594	4010	5570	2580	1560	924	836	409
11	10300	1980	2850	1450	700	3480	4890	2400	1570	731	1020	381
12	6640	1860	2470	1040	1340	3050	4400	2110	1150	858	1180	365
13	4730	1750	2240	901	2150	4990	3920	1940	921	1640	1110	345
14	3800	1680	2200	890	3100	23400	3510	1780	818	1530	1910	319
15	3220	1680	1650	897	2890	13300	3160	1630	949	987	1580	315
16	2730	1610	1610	954	2250	9150	2860	1530	825	668	1010	359
17	2400	1510	1610	725	1660	6830	2700	1440	735	556	878	471
18	2110	1440	1570	614	1300	5760	2540	1390	720	515	988	633
19	1950	1400	1500	600	1160	6060	2370	1420	882	623	994	857
20	2200	1350	1380	595	1170	5000	2260	1430	967	662	797	1450
21	8320	1210	1540	590	1170	4570	2150	1320	944	1260	629	673
22	10100	1140	1410	585	1020	11400	2010	1170	1030	964	1350	609
23	6790	1040	1210	600	970	27300	1950	1100	781	682	920	612
24	4980	980	1220	651	2040	15100	1940	1040	632	567	983	937
25	4490	885	1100	687	18900	9900	3590	979	598	559	796	2040
26	8200	880	1120	710	9400	7440	5390	921	611	711	711	2390
27	6640	850	1150	697	5730	6050	5590	879	1320	713	614	2270
28	5200	855	1120	692	5130	5180	4290	825	1190	595	566	2280
29	4380	1140	1120	585	---	4720	4050	758	1410	462	513	1720
30	3820	1420	1030	476	---	4270	3550	809	1160	500	490	1360
31	4650	---	881	470	---	3720	---	790	---	488	517	---
TOTAL	145800	62850	57011	24360	67410	247200	161750	57471	29661	24142	28673	25909
MEAN	4703	2095	1839	786	2408	7974	5392	1854	989	779	925	864
MAX	14700	6710	8500	1450	18900	27300	23400	3790	1570	1640	1910	2390
MIN	1770	850	864	470	455	3050	1940	758	598	462	490	315
(†)	273	270	278	286	304	285	278	299	298	341	303	285
MEAN‡	4976	2365	2117	1072	2712	8259	5670	2153	1287	1120	1228	1149
CFSM‡	2.63	1.25	1.12	.57	1.43	4.36	3.00	1.14	.68	.59	.65	.61
IN‡	3.03	1.40	1.29	.66	1.49	5.03	3.35	1.31	.76	.68	.75	.68

CAL YR 1976 TOTAL 1029562 MEAN 2813 MAX 44800 MIN 448 MEAN‡ 3098 CFSM‡ 1.64 IN‡ 22.28
WTR YR 1977 TOTAL 932237 MEAN 2554 MAX 27300 MIN 315 MEAN‡ 2846 CFSM‡ 1.50 IN‡ 20.41

NOTE.--For water-quality data see "Water Resources Data for Pennsylvania", Volume 1.

01475000 MANTUA CREEK AT PITMAN, NJ

LOCATION.--Lat 39°44'14", long 75°06'53", Gloucester County, Hydrologic Unit 02040202 at bridge on Delsea Drive, 0.9 mi (1.5 km) east of Pitman, and 2.0 mi (3.2 km) upstream from Porch Branch.

DRAINAGE AREA.--6.05 mi² (15.67 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: April 1940 to September 1976.
CHEMICAL ANALYSES: Water years 1958-59, 1962, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./ 100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV 10...	1020	104	7.1	5.5	3	11.7	1.2	84	--	80	--	34
FEB 01...	1205	147	6.6	2.0	2	13.2	--	86	<2	44	<2	37
APR 06...	1110	98	7.0	10.5	7	11.2	1.8	872	46	41	23	37
MAY 16...	1130	100	7.4	19.0	5	10.0	1.6	88	8	460	5	32
JUN 15...	1105	101	7.5	20.5	2	6.0	1.9	220	7	250	14	33
JUL 21...	1115	104	7.5	27.5	1	6.1	2.1	--	23	--	<2	33
AUG 16...	1100	126	7.6	25.0	6	6.3	2.2	--	33	--	79	37

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV 10...	22	7.6	3.6	3.5	2.6	15	0	12	1.9	16	7.5
FEB 01...	27	8.1	4.1	8.3	2.5	12	0	10	4.8	18	14
APR 06...	26	9.5	3.3	3.6	2.0	13	0	11	2.1	16	7.3
MAY 16...	20	7.2	3.5	3.5	2.1	15	0	12	1.0	14	7.4
JUN 15...	13	7.3	3.7	3.4	2.0	24	0	20	1.2	14	7.7
JUL 21...	14	7.3	3.7	4.3	2.2	23	0	19	1.2	12	7.7
AUG 16...	17	8.6	3.8	3.9	2.4	24	0	20	1.0	14	7.9

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	67	0	--	--	--	--	1.4	--	.02	--	2.2
FEB 01...	82	0	--	--	--	--	1.7	--	.04	--	1.2
APR 06...	62	4	--	--	--	--	1.4	--	.03	--	--
MAY 16...	60	0	--	--	--	--	1.1	--	.04	--	7.0
JUN 15...	65	4	--	--	--	--	1.1	--	.02	--	5.6
JUL 21...	64	13	.39	.01	.23	.31	.54	.94	.03	.01	6.3
AUG 16...	69	6	.44	.02	.17	.37	.54	1.0	.06	.01	4.3

01475030 MONONGAHELA BROOK AT WENONAH, NJ

LOCATION.--Lat 39°47'09", long 75°08'24", Gloucester County, Hydrologic Unit 02040202, at bridge on Glassboro Road, 1.3 mi (2.1 km) north of Sewell, and 0.6 mi (1.0 km) southeast of Wenonah Municipal building.

DRAINAGE AREA.--3.11 mi² (8.05 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 10...	1205	180	7.0	8.5	4	10.0	1.1	8170	--	160	--	45
FEB 01...	1300	172	6.3	3.0	7	13.4	--	812	2	810	<2	41
APR 06...	1245	211	7.0	12.5	20	8.6	1.0	100	70	220	110	46
MAY 19...	1010	185	6.9	18.0	7	8.2	1.3	830	2	1200	1600	51
JUN 15...	1210	191	7.1	18.5	6	7.5	3.2	270	14	1900	330	47
JUL 21...	1210	180	7.4	22.0	2	8.0	.9	--	110	--	23	44
AUG 16...	1200	181	7.0	22.5	6	7.4	2.4	--	130	--	240	43

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 10...	35	11	4.3	10	5.4	12	0	10	1.9	--	23	24
FEB 01...	36	11	3.3	7.6	4.6	6	0	5	4.8	--	25	19
APR 06...	36	11	4.6	11	6.2	12	0	10	1.9	--	36	21
MAY 19...	43	12	5.0	9.5	4.9	10	0	8	2.0	.0	27	22
JUN 15...	29	11	4.7	11	5.1	22	0	18	2.8	--	23	18
JUL 21...	28	10	4.6	10	4.8	20	0	16	1.3	--	19	23
AUG 16...	36	10	4.4	10	5.0	9	0	7	1.4	--	19	23

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	134	10	--	--	--	--	1.4	--	.05	--	1.4
FEB 01...	--	107	0	--	--	--	--	1.7	--	.05	--	.8
APR 06...	--	129	13	--	--	--	--	2.0	--	.08	--	--
MAY 19...	15	102	14	--	--	--	--	1.1	--	.04	--	6.3
JUN 15...	--	125	8	--	--	--	--	1.1	--	.05	--	5.8
JUL 21...	--	113	9	1.1	.01	.11	.37	.48	1.6	.06	.00	6.4
AUG 16...	--	116	9	.99	.01	.10	.50	.60	1.6	.09	.01	4.2

01475030 MONONGAHELA BROOK AT WENONAH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 19...	1010	50	3	40	0	0	3	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 19...	580	0	110	.0	17	0	70	0

01475045 MANTUA CREEK AT MANTUA, NJ

LOCATION.--Lat 39°47'42", long 75°10'21", Gloucester County, Hydrologic Unit 02040202, at bridge on State Route 45, 2.4 mi (3.9 km) northwest of Barnsboro, and 1.3 mi (2.1 km) east of Gates of Heaven Memorial Park.

DRAINAGE AREA.--41.5 mi² (107.5 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)
NOV 10...	1250	206	7.6	8.0	15	10.2	1.2	720	--	800	--	52
FEB 03...	1120	204	7.4	.0	6	12.4	.6	B1700	>2400	B1500	>2400	52
APR 06...	1325	167	7.7	12.0	10	7.8	1.7	1000	540	170	540	49
MAY 19...	0900	224	7.7	19.5	30	6.7	4.2	B2300	>2400	2900	540	55
JUN 15...	1310	211	7.3	21.0	45	5.3	3.1	B7400	1700	B62000	2400	49
JUL 13...	1030	172	7.6	24.0	7	5.8	3.9	--	9200	--	790	42
AUG 16...	1305	231	7.4	25.0	9	6.6	4.7	--	>2400	--	2400	60

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV 10...	26	15	3.6	16	3.5	32	0	26	1.3	--	26	16
FEB 03...	6	15	3.6	34	3.4	56	0	46	3.6	--	25	37
APR 06...	22	14	3.5	14	3.1	33	0	27	1.1	--	23	14
MAY 19...	13	16	3.6	20	3.3	51	0	42	1.6	.0	24	19
JUN 15...	7	14	3.5	19	3.1	51	0	42	4.1	--	23	17
JUL 13...	10	12	2.9	12	3.2	39	0	32	1.6	--	17	14
AUG 16...	9	18	3.7	20	4.3	62	0	51	3.9	--	24	18

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 10...	--	153	11	--	--	--	--	1.4	--	.16	--	2.6
FEB 03...	--	165	11	--	--	--	--	1.5	--	.10	--	6.8
APR 06...	--	92	13	--	--	--	--	1.3	--	.11	--	--
MAY 19...	8.7	118	56	--	--	--	--	1.4	--	.18	--	6.4
JUN 15...	--	127	42	--	--	--	--	1.3	--	.49	--	6.2
JUL 13...	--	103	42	.36	.01	.09	.40	.49	.86	.24	.06	7.4
AUG 16...	--	138	55	.37	.01	.21	1.2	1.4	1.8	.41	.08	6.5

01475045 MANTUA CREEK AT MANTUA, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
19...	0900	30	4	80	0	0	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
19...	100	5	80	.0	15	0	30	0

01477050 DELAWARE RIVER AT CHESTER, PA

LOCATION.--Lat 39°50'12", long 75°22'00", Delaware County, Hydrologic Unit 02040202, at end of Reynolds Aluminum Company pier, 0.5 mi (0.8 km) downstream from Chester Creek, and at river mile 82.30 (132.42 km).

DRAINAGE AREA.--10,300 m^2 (26,680 km^2).

PERIOD OF DAILY RECORD.--
TIDE ELEVATIONS: October 1972 to June 1977 (discontinued). July 1967 to September 1973, used as auxiliary gage for computing tidal volumes for Delaware River at Delaware Memorial Bridge, Wilmington, DE (station 01482100).
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: December 1961 to current year.
DISSOLVED OXYGEN: December 1961 to current year.

GAGE.--Water-stage recorder and water-quality monitor. Datum of gage is -10.00 ft (-3.048 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records of tide elevations good. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR CURRENT YEAR.--
TIDE ELEVATION: Maximum, 6.32 ft (1.926 m) Oct. 9; minimum, -5.12 ft (-1.561 m) Feb. 6.
SPECIFIC CONDUCTANCE: Maximum, 1,360 micromhos July 28-31, Aug. 1; minimum, 120 micromhos Mar. 19.
WATER TEMPERATURES: Maximum, 33.0°C July 21; minimum, 0.0°C on many days in winter months.
DISSOLVED OXYGEN: Maximum, 10.3 mg/L Mar. 24-26; minimum, 0.0 mg/L July 6-9.

EXTREMES FOR PERIOD OF RECORD.--
TIDE ELEVATION: Maximum, 7.06 ft (2.152 m) Dec. 2, 1974; minimum, -5.75 ft (-1.753 m) Apr. 4, 1975.
SPECIFIC CONDUCTANCE: Maximum, 5,900 micromhos Oct. 7, 1965; minimum, 111 micromhos Apr. 26, 27, 1972.
pH: Maximum, 8.7 Sept. 13, 14, 1971; minimum, 5.5 Dec. 10, 11, 1969.
WATER TEMPERATURES: Maximum, 33.0°C July 21, 1977; minimum, 0.0°C on many day: during winter months.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L Feb. 2, 3, 1976; minimum, 0.0 mg/L on many days during summer months.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.32	4.42	4.88	5.06	4.15	4.88	5.34	5.23	5.32	--	--	--
high tide	Date	9	4	7	10	24	16	5	29	2	--	--	--
Minimum	Elevation	-3.30	-3.64	-4.80	-4.89	-5.12	-4.62	-3.51	-3.60	-3.08	--	--	--
low tide	Date	22	23	22	1	6	23	8	9	3	--	--	--
Mean high tide		3.87	3.17	2.71	2.47	2.82	3.45	3.68	3.80	4.00	--	--	--
Mean water level		1.25	0.52	0.16	0.14	0.28	0.81	0.93	0.96	1.21	--	--	--
Mean low tide		-1.71	-2.39	-2.67	-3.00	-2.58	-2.12	-2.12	-2.21	-1.94	--	--	--

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	194	176	182	267	253	259	298	288	293
2	---	---	---	197	177	186	270	255	262	307	290	295
3	---	---	---	206	180	196	281	261	270	297	289	293
4	---	---	---	218	191	201	294	261	272	305	294	298
5	552	386	457	219	193	201	300	270	280	306	297	302
6	542	378	442	209	194	201	287	270	279	312	303	307
7	479	378	423	207	194	200	295	272	281	319	306	313
8	465	369	412	225	190	198	298	274	283	325	309	313
9	652	366	439	211	191	196	317	288	301	328	313	319
10	456	329	361	215	194	200	319	306	313	334	315	322
11	342	290	322	247	192	205	318	296	310	334	316	323
12	306	256	282	256	198	220	313	289	302	419	315	345
13	273	236	255	233	205	218	306	280	291	393	347	365
14	247	221	232	230	209	215	306	273	288	---	---	---
15	241	217	227	226	208	212	301	279	289	---	---	---
16	228	206	217	227	206	212	295	276	285	---	---	---
17	219	203	211	223	209	214	299	281	288	---	---	---
18	219	197	207	233	212	219	304	280	289	---	---	---
19	214	198	205	230	214	221	294	278	285	---	---	---
20	214	195	204	237	216	225	295	278	286	---	---	---
21	214	198	203	241	219	229	302	279	286	---	---	---
22	200	193	196	247	223	233	287	273	281	---	---	---
23	201	191	195	254	226	237	290	277	282	---	---	---
24	200	193	196	258	232	240	285	276	280	---	---	---
25	199	191	195	252	234	244	286	275	279	526	417	463
26	212	189	194	261	237	245	291	277	283	507	418	456
27	209	190	194	266	239	247	306	279	284	482	422	443
28	206	190	197	296	240	249	292	281	285	524	425	453
29	208	189	196	266	242	251	301	283	292	---	---	---
30	200	186	192	269	248	256	302	287	293	---	---	---
31	212	182	190	---	---	---	302	291	298	---	---	---
MONTH	652	182	261	296	176	218	319	253	286	526	288	347

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	315	302	309	207	174	184	248	226	232
2	471	435	450	317	288	301	204	173	180	239	223	232
3	710	444	488	297	271	285	183	166	177	243	212	225
4	621	452	504	293	262	271	177	161	168	227	213	220
5	797	467	545	270	242	256	171	152	164	230	211	218
6	543	461	491	279	232	248	174	150	163	232	207	214
7	583	467	504	243	214	226	181	138	153	226	204	211
8	651	466	523	221	184	202	352	142	162	219	203	209
9	775	472	592	218	175	190	186	141	156	224	199	209
10	790	488	606	206	172	184	198	147	161	218	199	206
11	837	502	632	203	168	177	187	152	165	221	202	209
12	845	501	624	206	167	177	193	154	167	234	203	213
13	1110	507	706	201	168	178	181	156	168	231	207	215
14	1030	507	651	191	165	182	181	158	170	228	208	216
15	836	502	607	203	161	185	194	158	176	234	210	217
16	712	501	572	190	170	176	195	169	181	230	208	218
17	729	491	563	160	124	140	202	174	183	228	211	218
18	794	483	582	156	123	134	197	174	186	238	212	217
19	838	489	600	164	120	135	210	183	192	233	211	218
20	919	493	618	153	125	137	206	185	194	230	212	220
21	762	490	601	156	132	147	214	196	203	234	215	222
22	692	478	565	157	136	149	218	195	206	247	217	224
23	629	462	538	205	148	175	223	197	208	245	216	225
24	988	473	615	188	158	171	221	205	211	238	220	227
25	677	414	489	196	151	170	220	205	211	245	225	232
26	434	367	407	199	156	166	227	205	217	265	228	235
27	390	338	360	168	161	170	236	216	229	254	233	239
28	340	308	322	188	166	175	239	228	234	260	236	243
29	---	---	---	192	166	179	238	223	231	264	239	246
30	---	---	---	199	170	182	236	223	229	261	244	252
31	---	---	---	194	169	182	---	---	---	266	252	258
MONTH	1110	308	546	317	120	192	352	138	188	266	199	224

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	276	257	265	761	416	529	1360	752	1100	1080	536	784
2	311	255	266	807	431	554	1320	696	961	987	560	776
3	291	263	272	867	449	590	1220	676	937	950	548	734
4	301	272	280	893	459	618	1160	708	910	1150	533	778
5	319	276	291	851	473	634	1050	657	846	1160	583	847
6	386	282	315	997	505	698	1020	618	819	1130	575	833
7	366	287	321	974	504	727	953	575	763	1180	535	789
8	373	294	328	1000	546	753	1060	582	780	1230	572	830
9	397	293	332	1000	564	758	1100	578	783	1150	595	840
10	347	289	313	1150	518	747	1090	592	787	1320	582	888
11	387	295	324	1140	531	753	1170	548	753	1220	578	826
12	369	310	335	1050	537	744	1140	545	743	1190	607	857
13	374	316	337	926	504	666	1030	536	735	1280	637	917
14	365	317	337	779	482	611	1020	489	684	1230	636	896
15	377	319	341	832	479	624	813	458	611	1250	630	888
16	400	322	354	888	493	636	813	479	633	1350	681	1010
17	440	329	372	898	502	647	858	470	647	1350	766	1050
18	447	339	380	878	509	657	754	475	598	1350	763	1060
19	475	342	389	944	518	692	843	474	622	1340	823	1090
20	517	355	421	1020	547	726	860	495	662	1320	689	1000
21	555	352	420	1050	588	784	980	501	687	1290	679	966
22	545	357	427	984	538	733	890	501	657	1320	668	969
23	549	364	440	1110	514	730	873	461	604	1340	663	931
24	605	377	477	1090	558	774	948	492	660	1200	624	852
25	643	387	491	955	552	738	934	463	610	1020	514	755
26	687	381	483	1180	523	710	888	477	627	994	474	691
27	681	399	505	1150	795	795	925	490	650	755	394	522
28	776	423	538	1360	607	868	896	503	663	465	335	390
29	982	351	479	1360	648	925	898	507	670	363	287	324
30	710	383	505	1360	716	1030	964	530	721	313	274	294
31	---	---	---	1360	767	1070	1090	504	774	---	---	---
MONTH	982	255	378	1360	416	726	1360	458	732	1350	274	813
YEAR	1360	120	412									

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	6.9	6.6	6.7	6.7	6.6	6.6	6.9	6.8	6.9
2	---	---	---	6.8	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.8
3	---	---	---	6.8	6.7	6.7	6.8	6.7	6.7	6.8	6.8	6.8
4	---	---	---	6.8	6.7	6.7	6.8	6.7	6.7	6.9	6.8	6.8
5	6.7	6.6	6.6	6.7	6.7	6.7	6.7	6.6	6.7	6.9	6.8	6.8
6	6.7	6.4	6.6	6.7	6.6	6.7	6.7	6.6	6.7	6.8	6.5	6.7
7	6.6	6.6	6.6	6.7	6.6	6.6	6.7	6.6	6.7	6.9	6.8	6.8
8	6.8	6.6	6.6	6.7	6.6	6.6	6.8	6.6	6.7	6.9	6.8	6.9
9	6.8	6.6	6.7	6.6	6.6	6.6	6.7	6.6	6.6	6.9	6.8	6.8
10	6.8	6.7	6.7	6.8	6.6	6.7	6.7	6.6	6.7	6.8	6.8	6.8
11	6.8	6.7	6.8	6.9	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.8
12	6.8	6.7	6.8	6.8	6.7	6.7	6.7	6.6	6.7	6.9	6.8	6.8
13	6.8	6.7	6.8	6.8	6.7	6.7	6.8	6.7	6.7	6.8	6.8	6.8
14	6.8	6.7	6.7	6.7	6.7	6.7	6.8	6.1	6.7	---	---	---
15	6.7	6.6	6.7	6.7	6.6	6.7	6.9	6.8	6.8	---	---	---
16	6.7	6.5	6.6	6.7	6.6	6.7	6.9	6.8	6.8	---	---	---
17	6.6	6.5	6.5	6.7	6.6	6.7	6.9	6.8	6.8	---	---	---
18	6.7	6.5	6.6	6.7	6.6	6.6	6.9	6.8	6.9	---	---	---
19	6.7	6.6	6.7	6.7	6.6	6.6	6.9	6.8	6.9	---	---	---
20	6.7	6.6	6.6	6.7	6.6	6.6	6.9	6.8	6.8	---	---	---
21	6.7	6.7	6.7	6.8	6.6	6.6	7.0	6.8	6.9	---	---	---
22	---	---	---	6.8	6.6	6.6	6.9	6.9	6.9	---	---	---
23	---	---	---	7.0	6.7	6.7	6.9	6.8	6.9	---	---	---
24	---	---	---	6.9	6.7	6.7	6.9	6.9	6.9	---	---	---
25	---	---	---	6.7	6.7	6.7	6.9	6.9	6.9	6.9	6.7	6.8
26	6.8	6.7	6.7	6.7	6.7	6.7	6.9	6.8	6.9	6.8	6.7	6.7
27	6.8	6.7	6.8	6.8	6.7	6.7	6.9	6.8	6.9	6.8	6.7	6.7
28	6.9	6.8	6.8	6.8	6.6	6.7	6.9	6.5	6.8	6.8	6.7	6.7
29	6.8	6.7	6.8	6.7	6.6	6.7	6.9	6.8	6.8	---	---	---
30	6.8	6.7	6.7	6.8	6.6	6.7	6.9	6.8	6.8	---	---	---
31	6.8	6.7	6.7	---	---	---	6.9	6.8	6.8	---	---	---
MONTH	6.9	6.4	6.7	7.0	6.6	6.7	7.0	6.1	6.8	6.9	6.5	6.8

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	7.1	6.9	7.0	7.6	6.8	6.8	7.0	6.7	6.8
2	6.7	6.6	6.7	7.0	7.0	7.0	7.0	6.8	6.8	6.8	6.8	6.8
3	6.8	6.7	6.7	7.1	6.9	7.0	6.9	6.8	6.9	6.9	6.7	6.8
4	6.7	6.6	6.7	7.0	6.9	7.0	6.9	6.8	6.9	6.8	6.7	6.7
5	6.8	6.6	6.7	7.0	6.9	6.9	6.9	6.8	6.9	6.7	6.6	6.7
6	6.8	6.6	6.7	7.7	6.9	7.0	7.6	6.8	6.9	6.8	6.6	6.7
7	6.7	6.6	6.7	7.0	6.9	7.0	7.4	7.0	7.0	6.7	6.6	6.6
8	6.8	6.6	6.7	7.0	6.9	6.9	7.3	6.9	7.0	6.6	6.6	6.6
9	6.8	6.7	6.7	8.1	6.9	6.9	7.1	6.9	6.9	6.8	6.6	6.7
10	6.8	6.7	6.7	7.2	6.8	6.9	7.2	6.8	6.9	6.8	6.7	6.7
11	6.8	6.6	6.7	6.9	6.8	6.8	7.0	6.8	6.8	6.8	6.7	6.7
12	6.8	6.6	6.7	7.0	6.7	6.7	7.0	6.7	6.8	6.9	6.7	6.7
13	6.8	6.6	6.7	6.8	6.7	6.7	6.8	6.7	6.7	6.8	6.7	6.7
14	6.7	6.6	6.7	6.9	6.6	6.7	6.7	6.6	6.7	6.9	6.7	6.7
15	6.8	6.6	6.7	7.0	6.8	6.9	6.8	6.6	6.7	6.8	6.7	6.7
16	6.8	6.6	6.7	6.9	6.9	6.9	6.8	6.7	6.7	6.8	6.7	6.7
17	6.9	6.7	6.7	6.8	6.7	6.8	6.9	6.6	6.8	6.8	6.7	6.7
18	6.7	6.7	6.7	6.8	6.7	6.7	6.7	6.6	6.6	6.7	6.6	6.7
19	6.8	6.7	6.7	6.9	6.7	6.7	6.7	6.6	6.6	6.8	6.6	6.7
20	6.8	6.7	6.7	6.8	6.6	6.7	6.7	6.6	6.6	6.8	6.6	6.7
21	6.8	6.7	6.7	6.8	6.6	6.7	6.6	6.6	6.6	6.7	6.6	6.6
22	6.8	6.7	6.8	6.8	6.6	6.7	6.6	6.6	6.6	6.6	6.5	6.6
23	6.9	6.8	6.8	7.2	6.8	6.9	6.6	6.6	6.6	6.6	6.5	6.5
24	6.9	6.8	6.8	7.1	6.9	7.0	6.7	6.6	6.6	6.6	6.5	6.5
25	6.9	6.8	6.8	7.1	6.9	7.0	6.6	6.6	6.6	6.5	6.5	6.5
26	6.9	6.9	6.9	7.0	6.9	6.9	6.8	6.6	6.6	6.5	6.4	6.5
27	6.9	6.8	6.9	7.0	6.8	6.9	6.6	6.6	6.6	6.5	6.4	6.5
28	7.0	6.9	6.9	6.9	6.7	6.8	6.7	6.6	6.6	6.6	6.4	6.5
29	---	---	---	6.8	6.7	6.7	6.8	6.6	6.7	6.5	6.4	6.5
30	---	---	---	6.8	6.6	6.7	6.8	6.7	6.8	6.5	6.5	6.5
31	---	---	---	6.9	6.6	6.7	---	---	---	6.5	6.5	6.5
MONTH	7.0	6.6	6.7	8.1	6.6	6.8	7.6	6.6	6.7	7.0	6.4	6.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.5	6.5	6.5	6.6	6.5	6.6	6.8	6.7	6.7	6.6	6.5	6.6
2	6.5	6.5	6.5	6.6	6.5	6.6	6.7	6.6	6.7	6.6	6.5	6.6
3	6.6	6.5	6.5	6.6	6.5	6.6	6.7	6.6	6.7	6.6	6.6	6.6
4	6.6	6.5	6.6	6.6	6.5	6.6	6.7	6.6	6.7	6.7	6.6	6.6
5	6.6	6.5	6.5	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.6
6	6.6	6.5	6.6	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.6
7	6.6	6.6	6.6	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.6
8	6.7	6.6	6.6	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.7
9	6.7	6.6	6.6	6.6	6.5	6.6	6.7	6.6	6.6	6.8	6.6	6.7
10	6.7	6.6	6.6	6.6	6.5	6.6	6.7	6.6	6.6	6.8	6.6	6.7
11	6.6	6.6	6.6	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.7
12	6.6	6.6	6.6	6.7	6.6	6.6	6.7	6.6	6.6	6.7	6.7	6.7
13	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.7
14	6.6	6.5	6.5	6.7	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.8
15	6.6	6.5	6.5	6.7	6.6	6.6	7.4	6.6	6.7	6.8	6.7	6.7
16	6.6	6.5	6.5	6.7	6.6	6.6	6.6	6.6	6.6	6.8	6.7	6.8
17	6.6	6.5	6.5	6.7	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.7
18	6.6	6.5	6.6	6.7	6.6	6.6	6.6	6.6	6.6	6.8	6.7	6.7
19	6.6	6.5	6.6	6.7	6.5	6.6	6.7	6.6	6.6	6.7	6.7	6.7
20	6.6	6.5	6.5	6.6	6.6	6.6	6.7	6.6	6.6	6.8	6.6	6.7
21	6.6	6.5	6.5	6.9	6.5	6.6	6.7	6.6	6.6	6.7	6.6	6.7
22	6.7	6.5	6.6	6.8	6.6	6.6	6.7	6.6	6.6	6.7	6.7	6.7
23	6.6	6.5	6.6	6.7	6.7	6.7	6.7	6.6	6.6	6.7	6.6	6.7
24	6.6	6.5	6.6	6.8	6.7	6.7	6.7	6.6	6.7	6.7	6.6	6.6
25	6.6	6.5	6.6	6.8	6.8	6.8	6.7	6.6	6.7	6.7	6.7	6.7
26	6.6	6.5	6.6	6.8	6.7	6.8	6.7	6.6	6.6	6.7	6.7	6.7
27	6.6	6.5	6.6	6.8	6.7	6.8	6.7	6.6	6.6	6.7	6.7	6.7
28	6.7	6.5	6.6	6.9	6.7	6.8	6.7	6.6	6.6	6.7	6.6	6.7
29	6.6	6.5	6.6	6.8	6.7	6.7	6.6	6.6	6.6	6.9	6.7	6.7
30	6.6	6.5	6.6	6.8	6.7	6.7	6.6	6.6	6.6	6.8	6.7	6.7
31	---	---	---	6.8	6.7	6.7	6.7	6.6	6.6	---	---	---
MONTH	6.7	6.5	6.6	6.9	6.5	6.6	7.4	6.6	6.6	6.9	6.5	6.7
YEAR	8.1	6.1	6.7									

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	10.5	9.5	10.0	7.0	5.5	6.0	1.0	0.5	1.0
2	---	---	---	10.5	9.5	10.0	7.0	6.0	6.5	1.5	0.5	1.0
3	---	---	---	10.0	9.5	10.0	6.5	4.5	5.5	1.5	0.5	1.0
4	---	---	---	10.5	9.5	10.0	6.0	5.0	5.5	1.0	1.0	1.0
5	20.0	19.5	19.5	10.0	9.0	9.5	6.0	5.0	5.5	1.5	1.0	1.5
6	20.5	19.0	20.0	9.5	9.0	9.0	6.5	5.0	5.5	2.0	1.0	1.5
7	20.5	19.5	20.0	9.5	9.0	9.0	6.5	5.5	6.0	2.0	1.0	1.5
8	20.5	20.0	20.0	9.5	8.5	9.0	6.0	4.5	5.5	1.5	1.0	1.0
9	20.5	20.0	20.5	9.0	8.0	8.5	6.0	4.5	5.0	2.0	1.0	1.0
10	20.0	18.5	19.0	9.5	8.0	8.5	6.0	5.0	5.0	1.5	1.0	1.0
11	19.0	18.5	18.5	9.0	8.0	8.5	6.0	5.0	5.5	1.5	1.0	1.0
12	18.5	18.0	18.0	9.0	8.0	8.5	6.0	5.0	5.5	1.5	0.5	1.0
13	18.5	17.0	18.0	9.0	7.5	8.0	6.0	4.5	5.0	1.0	0.0	0.5
14	18.0	16.5	17.0	8.5	7.0	8.0	5.5	4.0	4.5	---	---	---
15	17.5	16.0	16.5	9.5	7.5	8.5	5.5	4.5	5.0	---	---	---
16	17.0	16.0	16.5	9.0	7.5	8.5	5.5	4.5	5.0	---	---	---
17	16.0	15.5	15.5	9.5	8.0	8.5	5.5	4.5	5.0	---	---	---
18	15.5	15.0	15.0	9.5	8.0	8.5	5.5	4.5	5.0	---	---	---
19	15.0	14.0	14.5	9.5	8.0	8.5	5.0	4.0	4.5	---	---	---
20	15.0	14.5	14.5	9.0	8.0	8.5	5.0	4.5	4.5	---	---	---
21	14.5	14.0	14.5	8.5	7.5	8.0	5.0	3.5	4.5	---	---	---
22	14.5	14.0	14.5	8.0	7.0	7.5	4.5	3.0	4.0	---	---	---
23	14.0	14.0	14.0	8.0	6.5	7.0	4.0	3.0	3.5	---	---	---
24	14.0	13.5	13.5	8.0	6.0	6.5	3.5	2.0	3.0	---	---	---
25	14.0	13.5	13.5	7.0	6.5	6.5	3.5	3.0	3.0	1.0	0.5	0.5
26	13.5	11.5	12.5	8.0	6.0	7.0	4.0	3.0	3.0	1.5	0.0	0.5
27	11.5	11.0	11.0	8.0	7.0	7.0	3.5	3.0	3.0	1.5	0.0	0.5
28	11.0	10.5	10.5	8.0	7.0	7.0	3.5	3.0	3.0	1.0	0.0	0.5
29	11.0	10.0	10.5	7.5	6.5	7.0	3.5	1.5	2.5	---	---	---
30	10.5	10.0	10.0	7.0	6.0	6.0	2.0	1.0	1.5	---	---	---
31	11.0	10.0	10.5	---	---	---	1.5	0.5	1.0	---	---	---
MONTH	20.5	10.0	15.5	10.5	6.0	8.0	7.0	0.5	4.5	2.0	0.0	1.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	6.5	5.0	5.5	11.5	9.0	10.0	19.0	17.0	18.0
2	1.5	0.5	1.0	6.0	4.5	5.5	11.0	9.5	10.0	19.0	17.5	18.0
3	0.5	0.0	0.5	7.0	5.0	6.0	13.0	10.0	12.0	19.0	18.0	18.5
4	1.0	0.0	0.5	7.5	6.0	6.5	12.0	11.5	12.0	18.0	17.5	17.5
5	1.0	0.0	0.5	7.5	6.0	7.0	12.0	10.5	11.5	19.0	17.5	18.0
6	0.5	0.0	0.0	7.0	6.0	7.0	11.0	9.5	10.5	20.0	18.0	19.0
7	1.5	0.0	0.5	7.0	6.0	6.5	10.0	8.5	9.5	19.5	18.5	19.0
8	1.5	0.0	0.5	7.5	5.5	6.5	10.5	9.0	9.5	19.5	17.5	18.5
9	1.0	0.0	0.5	7.5	5.5	7.0	10.0	8.0	9.0	18.0	16.5	17.0
10	2.0	0.0	1.0	8.5	6.0	7.5	11.5	8.5	9.5	17.5	16.0	16.5
11	2.0	0.5	1.0	9.0	6.5	7.5	12.0	9.0	10.5	18.0	16.0	17.0
12	2.0	1.0	1.0	9.0	7.0	8.0	14.0	10.0	11.5	19.0	16.5	17.5
13	2.0	1.0	1.5	9.5	8.0	8.5	14.0	11.0	12.5	19.5	17.5	18.5
14	3.0	1.5	2.0	10.0	8.5	9.0	13.5	12.0	12.5	19.5	18.0	18.5
15	4.0	1.5	2.5	11.0	9.5	10.0	14.0	11.5	12.5	19.5	18.0	18.5
16	2.5	1.5	2.0	10.5	10.0	10.5	14.0	12.0	13.0	20.5	18.0	19.0
17	4.0	1.5	2.0	11.0	9.0	10.0	14.5	12.5	13.5	21.0	18.5	20.0
18	3.0	1.5	2.0	9.5	8.5	9.0	15.0	12.5	14.0	22.0	19.5	20.5
19	3.5	1.5	2.0	9.0	8.0	8.5	15.5	13.5	14.5	22.0	20.0	21.0
20	3.0	2.0	2.5	8.5	8.0	8.0	16.0	14.0	15.0	22.0	20.0	21.5
21	3.5	1.5	2.5	9.5	8.0	8.5	17.0	14.5	16.0	23.0	21.0	22.0
22	3.5	1.5	2.5	9.0	8.0	8.5	18.0	15.0	16.5	24.0	21.5	22.5
23	4.5	2.5	3.5	9.0	7.0	8.0	19.0	16.0	17.5	24.5	22.0	23.0
24	4.5	2.5	3.5	8.0	6.5	7.5	18.5	16.5	17.0	24.5	22.5	23.5
25	6.0	3.5	5.0	8.0	6.0	7.0	18.5	16.5	17.5	24.5	23.0	23.5
26	6.5	4.5	5.5	7.5	6.0	7.0	17.5	16.5	17.0	26.0	23.0	24.0
27	7.0	5.0	6.0	8.0	6.5	7.0	18.0	16.5	17.0	25.5	23.0	24.0
28	7.0	5.5	6.0	8.5	7.0	7.5	18.0	17.0	17.5	26.0	23.5	24.5
29	---	---	---	10.0	7.5	9.0	18.0	16.0	17.0	25.0	23.5	24.5
30	---	---	---	11.0	8.5	9.5	18.5	16.5	17.5	24.0	23.5	23.5
31	---	---	---	11.0	9.0	10.0	---	---	---	24.5	23.0	23.5
MONTH	7.0	0.0	2.0	11.0	4.5	8.0	19.0	8.0	13.5	26.0	16.0	20.5

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	23.0	23.5	28.0	26.5	27.0	29.5	28.0	28.5	30.0	28.0	29.0
2	25.0	23.0	24.0	28.0	26.5	27.5	29.5	28.0	29.0	30.0	28.5	29.0
3	24.5	23.5	24.0	28.0	26.5	27.5	29.0	28.5	28.5	30.0	28.5	29.0
4	24.5	23.0	24.0	28.0	26.5	27.5	30.0	28.5	29.0	29.5	28.5	29.0
5	24.5	23.5	24.0	29.0	27.0	28.0	31.0	28.5	29.5	29.5	28.5	29.0
6	24.0	23.0	23.5	30.0	27.5	28.5	30.5	29.5	30.0	30.0	28.5	29.0
7	23.5	22.0	22.5	29.0	28.0	28.5	31.0	29.5	30.0	29.0	28.0	28.5
8	23.0	21.5	22.0	30.0	28.0	28.5	31.0	29.5	30.0	28.5	27.5	28.0
9	22.0	21.5	21.5	29.5	28.5	29.0	31.5	30.0	30.5	28.0	27.0	27.5
10	21.5	21.0	21.5	29.5	28.5	29.0	31.5	30.0	30.5	28.0	26.5	27.5
11	22.0	20.5	21.5	29.5	28.0	28.5	31.5	29.5	30.5	27.0	26.0	26.5
12	23.0	21.5	22.0	30.0	28.0	28.5	31.0	30.0	30.5	27.0	25.5	26.0
13	23.5	21.5	22.5	30.5	28.5	29.0	30.5	30.0	30.5	26.5	25.5	26.0
14	24.0	22.0	23.0	30.5	29.0	29.5	30.0	29.5	29.5	26.0	25.0	25.5
15	24.0	22.5	23.5	31.0	29.0	30.0	30.5	29.0	29.5	25.5	24.5	25.0
16	25.0	23.0	24.0	31.5	29.0	30.5	30.5	29.5	30.0	25.0	24.5	24.5
17	25.0	23.0	24.0	31.5	29.5	31.0	30.5	29.5	30.0	25.5	24.5	25.0
18	25.5	23.5	24.5	32.0	30.0	31.0	29.5	28.5	29.0	26.0	24.5	25.0
19	26.0	24.0	25.0	32.5	30.5	31.5	29.5	28.0	28.5	26.5	25.0	25.5
20	26.5	24.5	25.5	32.0	31.0	31.5	29.0	27.5	28.0	26.0	24.5	25.5
21	26.0	24.5	25.5	33.0	31.0	32.0	28.5	27.0	28.0	25.5	24.5	25.0
22	26.5	24.5	25.5	32.0	31.0	31.5	28.0	27.0	27.5	25.0	24.0	24.5
23	26.5	24.5	25.5	31.5	30.0	30.5	28.5	27.0	27.5	24.5	24.0	24.5
24	27.0	25.0	25.5	31.0	30.0	30.0	28.5	27.5	28.0	25.0	24.0	24.5
25	26.0	25.5	25.5	30.0	29.0	29.5	28.0	26.5	27.5	24.0	22.5	23.0
26	27.0	25.5	26.0	30.0	28.5	29.0	28.5	26.5	27.5	24.0	22.5	23.5
27	28.0	25.5	26.5	29.5	28.0	29.0	28.5	27.0	27.5	24.0	23.0	23.5
28	27.5	26.0	26.5	29.5	28.0	28.5	29.0	27.0	28.0	23.5	22.5	23.0
29	28.0	26.0	27.0	29.5	28.0	28.5	29.0	27.5	28.5	23.0	22.0	22.5
30	28.0	26.5	27.0	29.0	28.0	28.5	29.5	28.0	29.0	23.0	22.0	22.5
31	---	---	---	29.5	28.0	28.5	29.5	28.5	29.0	---	---	---
MONTH	28.0	20.5	24.0	33.0	26.5	29.5	31.5	26.5	29.0	30.0	22.0	26.0
YEAR	33.0	0.0	16.0									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.0	8.1	8.6	7.8	6.8	7.2	8.1	7.7	7.9
2	---	---	---	8.9	8.4	8.6	7.9	7.3	7.6	8.7	8.1	8.5
3	---	---	---	8.6	8.2	8.4	8.2	7.7	7.9	8.9	8.5	8.7
4	---	---	---	8.3	7.9	8.1	8.2	7.6	7.8	9.4	9.0	9.2
5	4.4	3.0	3.6	8.3	7.8	8.0	7.9	7.4	7.6	9.4	8.9	9.2
6	3.9	2.1	2.9	8.6	8.0	8.3	7.7	7.2	7.4	9.3	8.9	9.1
7	2.8	1.8	2.2	8.6	8.1	8.3	8.5	7.7	7.8	9.2	8.8	9.1
8	2.3	1.4	1.8	8.5	8.0	8.3	7.9	7.4	7.6	9.2	9.0	9.1
9	4.3	1.4	2.9	8.5	8.2	8.4	8.3	7.2	7.6	9.1	8.9	9.0
10	4.1	3.3	3.7	9.1	8.4	8.7	8.3	7.4	7.9	9.0	8.8	8.9
11	4.6	3.7	4.2	9.1	8.7	8.9	8.5	7.3	7.6	9.0	8.8	8.9
12	5.5	4.2	4.7	9.0	8.4	8.7	7.3	6.7	7.0	9.9	8.7	9.1
13	6.2	4.9	5.6	9.0	8.5	8.6	8.2	6.8	7.5	9.9	9.5	9.7
14	7.1	6.0	6.6	9.0	8.6	8.8	8.2	7.5	7.8	---	---	---
15	7.5	6.6	7.0	8.8	8.3	8.6	8.2	7.5	7.8	---	---	---
16	7.2	6.4	6.9	8.7	8.0	8.3	7.9	7.1	7.4	---	---	---
17	6.7	5.9	6.4	8.3	7.7	8.0	7.3	7.0	7.1	---	---	---
18	6.5	5.5	6.1	8.1	7.6	7.8	7.4	6.9	7.1	---	---	---
19	6.3	5.5	5.9	8.1	7.6	7.8	7.2	6.8	7.0	---	---	---
20	5.9	5.3	5.6	7.9	7.5	7.7	6.7	6.4	6.5	---	---	---
21	6.4	5.9	6.1	7.9	7.5	7.6	7.2	6.3	6.7	---	---	---
22	6.6	6.1	6.4	8.2	7.4	7.7	6.9	6.4	6.6	---	---	---
23	6.6	6.3	6.5	8.7	7.8	8.2	6.8	6.3	6.5	---	---	---
24	6.5	6.2	6.4	8.8	8.0	8.4	7.2	6.7	6.9	---	---	---
25	6.5	6.3	6.4	8.4	7.9	8.2	7.6	7.1	7.4	7.5	6.7	7.1
26	8.0	6.5	7.3	8.2	7.6	7.9	7.9	7.3	7.6	7.2	6.5	6.9
27	8.1	7.8	7.9	7.9	7.2	7.6	8.1	7.7	7.8	6.9	6.1	6.4
28	8.4	8.0	8.2	7.6	6.9	7.3	8.2	7.9	8.0	6.9	5.8	6.2
29	8.6	8.2	8.4	7.4	6.7	7.0	8.0	7.0	7.6	---	---	---
30	8.5	7.9	8.2	7.5	6.8	7.0	8.0	7.6	7.8	---	---	---
31	8.5	8.0	8.1	---	---	---	8.1	7.7	7.9	---	---	---
MONTH	8.6	1.4	5.8	9.1	6.7	8.1	8.5	6.3	7.4	9.9	5.8	8.4

01477050 DELAWARE RIVER AT CHESTER, PA--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	8.0	7.0	7.9	8.8	8.1	8.4	3.9	2.8	3.1
2	6.1	5.4	5.7	8.4	7.7	8.1	8.4	7.6	8.0	4.2	3.1	3.5
3	6.5	5.2	5.7	8.0	7.6	7.8	8.3	7.4	7.6	4.2	3.4	3.7
4	5.8	4.9	5.4	7.9	7.5	7.6	7.9	7.3	7.6	3.7	3.2	3.4
5	6.0	4.7	5.4	7.9	7.4	7.6	8.5	7.6	8.0	3.4	3.0	3.2
6	6.0	5.2	5.6	8.7	7.4	8.1	9.4	8.1	8.9	3.5	2.8	3.0
7	5.9	5.2	5.6	9.3	8.3	8.8	9.5	9.1	9.3	3.1	2.5	2.8
8	5.7	4.9	5.4	9.4	9.0	9.2	9.4	8.8	9.1	3.2	2.3	2.7
9	5.7	4.7	5.2	9.4	8.9	9.1	9.3	8.8	9.0	4.4	2.7	3.5
10	5.3	4.3	4.8	9.0	8.5	8.8	8.9	8.4	8.7	5.1	3.9	4.5
11	5.4	4.0	4.5	8.7	8.1	8.4	8.7	8.3	8.5	5.3	4.5	4.9
12	6.3	3.7	4.3	8.3	7.8	8.1	8.4	7.8	8.2	5.2	4.4	4.8
13	5.5	3.6	4.3	8.1	7.6	7.8	8.2	7.7	7.9	5.1	4.2	4.7
14	5.4	3.6	4.3	8.0	7.4	7.7	7.9	7.2	7.5	5.4	4.0	4.7
15	4.6	3.4	4.0	8.7	8.0	8.2	7.7	6.9	7.1	5.3	3.8	4.5
16	4.8	3.7	4.1	8.5	8.2	8.4	7.1	6.3	6.6	5.4	3.5	4.4
17	4.9	3.9	4.4	8.9	8.5	8.7	6.5	5.8	6.1	5.5	3.8	4.6
18	4.9	4.1	4.5	9.0	8.5	8.8	6.3	5.3	5.6	5.1	3.6	4.4
19	5.0	4.1	4.6	9.1	8.7	8.9	5.6	4.7	5.1	5.5	3.5	4.5
20	5.3	4.0	4.6	8.9	8.3	8.7	5.1	4.3	4.6	5.2	3.4	4.3
21	5.6	4.5	5.0	8.7	8.1	8.4	4.7	3.8	4.2	5.1	3.3	4.1
22	5.7	4.8	5.2	9.1	8.1	8.4	4.3	3.6	4.0	4.5	3.2	3.8
23	5.4	4.8	5.1	9.8	9.0	9.6	4.1	3.3	3.7	3.8	2.8	3.3
24	6.1	4.7	5.3	10.3	9.5	9.9	4.2	3.4	3.8	3.0	2.1	2.7
25	6.3	5.4	5.8	10.3	9.8	10.1	3.9	3.0	3.6	2.2	1.5	1.9
26	6.8	5.8	6.2	10.3	9.8	10.0	3.9	2.7	3.2	1.6	1.1	1.4
27	6.3	5.7	6.0	9.9	9.3	9.6	2.9	2.0	2.4	1.1	0.8	1.0
28	7.5	6.0	6.8	9.3	8.8	9.1	2.8	2.0	2.3	1.1	0.4	0.7
29	---	---	---	9.0	8.6	8.7	3.6	2.3	2.8	1.6	0.4	1.0
30	---	---	---	8.7	8.2	8.5	3.7	2.8	3.1	1.5	0.9	1.1
31	---	---	---	8.9	7.8	8.4	---	---	---	1.1	0.5	0.7
MONTH	7.5	3.4	5.1	10.3	7.0	8.6	9.5	2.0	6.2	5.5	0.4	3.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1.1	0.3	0.5	0.9	0.2	0.5	1.7	0.7	1.1	1.3	0.4	0.9
2	1.0	0.3	0.4	0.8	0.2	0.4	1.4	0.5	0.9	1.4	0.4	0.8
3	1.5	0.2	0.8	0.6	0.2	0.4	1.1	0.4	0.7	1.3	0.4	0.7
4	1.5	1.0	1.3	0.6	0.2	0.4	1.4	0.4	0.8	1.5	0.4	0.8
5	1.5	1.0	1.1	0.5	0.1	0.2	1.9	0.5	0.9	1.6	0.5	0.9
6	1.5	0.8	1.1	0.5	.0	0.2	1.7	0.5	1.0	1.6	0.7	1.0
7	2.0	1.0	1.4	0.3	.0	0.1	2.3	0.5	1.1	2.1	0.7	1.1
8	2.5	1.3	1.9	0.5	.0	0.2	2.4	1.0	1.4	1.9	0.7	1.1
9	2.6	1.7	2.2	0.5	.0	0.2	2.1	1.1	1.5	2.2	0.9	1.5
10	2.7	1.9	2.3	1.5	0.1	0.4	1.6	0.8	1.1	2.3	1.4	1.6
11	3.0	2.1	2.5	1.7	0.3	0.7	1.8	0.8	1.1	1.9	0.9	1.4
12	2.8	2.2	2.4	2.0	0.4	0.9	1.8	0.8	1.1	2.2	1.0	1.5
13	2.6	1.6	2.0	1.5	0.7	1.1	1.4	0.7	1.0	2.7	1.0	1.9
14	2.1	1.3	1.6	1.3	0.3	0.7	1.4	0.7	1.1	3.2	1.9	2.6
15	1.8	1.0	1.3	0.6	0.1	0.3	1.7	0.6	1.0	2.8	1.5	2.0
16	1.3	0.6	1.0	0.7	0.1	0.3	1.6	0.4	1.0	2.9	1.3	2.0
17	1.6	0.6	1.0	0.7	0.1	0.4	1.4	0.8	1.1	2.8	1.1	1.9
18	1.6	0.8	1.0	0.6	0.2	0.3	1.3	0.5	0.8	2.1	1.0	1.5
19	1.5	0.5	1.0	1.3	0.1	0.5	1.4	0.4	0.9	1.9	1.0	1.4
20	1.5	0.6	1.0	1.1	0.1	0.3	1.4	0.4	0.8	2.4	0.9	1.1
21	1.5	0.5	1.0	1.0	0.1	0.4	1.7	0.2	0.9	1.5	0.9	1.1
22	1.5	0.4	0.9	2.1	0.3	0.9	2.4	1.1	1.5	1.4	0.9	1.1
23	1.5	0.4	0.8	2.1	0.9	1.4	1.4	0.6	1.0	1.5	0.8	0.9
24	1.7	0.4	0.8	3.4	1.3	2.2	0.9	0.5	0.6	1.1	0.6	0.8
25	1.5	0.4	0.8	3.6	2.2	2.7	1.5	0.5	0.8	2.2	1.0	1.6
26	1.0	0.2	0.5	2.8	1.6	2.1	1.6	0.5	0.9	2.2	1.6	1.8
27	1.1	0.2	0.4	2.6	1.1	1.9	1.8	0.5	1.0	1.8	1.3	1.5
28	1.3	0.2	0.4	2.4	1.1	1.6	1.6	0.7	1.1	1.4	0.8	1.1
29	1.1	0.3	0.8	2.5	0.8	1.4	1.6	0.6	1.0	2.2	1.0	1.5
30	1.1	0.2	0.6	2.0	0.6	1.1	1.3	0.7	0.9	2.6	1.5	2.1
31	---	---	---	1.7	0.5	1.1	1.6	0.5	1.0	---	---	---
MONTH	3.0	0.2	1.2	3.6	.0	0.8	2.4	0.2	1.0	3.2	0.4	1.4
YEAR	10.3	.0	4.6									

01477100 RACCOON CREEK NEAR MULLICA HILL, NJ

LOCATION.--Lat 39°42'31", long 75°12'05", Gloucester County, Hydrologic Unit 02040202, at bridge on Cedar Grove-Richwood Grove Road, 0.6 mi (1.0 km) upstream from Miery Run, 1.0 mi (1.6 km) downstream from outflow of Ewan Lake, 2.5 mi (4.0 km) southeast of Mullica Hill, and 4.0 mi (6.4 km) southwest of Pitman.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1953-59, 1959-63, 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	1350	158	7.1	6.0	2	10.4	.9	350	<20	B64	2	56
JAN 27...	1200	172	6.9	1.5	2	13.7	--	78	50	88	<2	56
APR 07...	1310	144	6.9	11.0	4	10.9	3.0	B13	--	--	--	58
MAY 12...	1040	150	7.3	9.0	3	14.0	1.2	120	240	100	240	51
JUN 14...	1430	148	7.5	22.0	2	8.0	.6	90	140	B1400	130	52
JUL 07...	1330	168	7.6	24.5	1	6.3	1.2	--	540	--	130	56
AUG 09...	1315	151	7.3	27.0	1	7.4	1.5	--	4	--	350	57

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	43	15	4.4	3.3	3.5	16	0	13	2.0	30	9.0
JAN 27...	43	15	4.6	3.7	3.5	16	0	13	3.2	30	11
APR 07...	50	16	4.4	2.9	3.1	10	0	8	2.0	29	8.4
MAY 12...	31	14	4.0	3.3	3.1	24	0	20	1.9	27	9.1
JUN 14...	34	14	4.1	3.4	3.0	22	0	18	1.1	26	9.4
JUL 07...	2	16	4.0	3.3	2.9	66	0	54	2.7	25	9.9
AUG 09...	24	16	4.1	3.4	3.8	40	0	33	3.2	22	10

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	131	1	--	--	--	--	1.4	--	.03	--	9.8
JAN 27...	86	0	--	--	--	--	1.1	--	.02	--	1.8
APR 07...	86	0	--	--	--	--	1.1	--	.02	--	2.4
MAY 12...	108	1	--	--	--	--	1.4	--	.03	--	6.7
JUN 14...	82	4	--	--	--	--	.80	--	.01	--	4.8
JUL 07...	103	5	.67	.01	.04	.41	.45	1.1	.03	.02	6.8
AUG 09...	99	4	.43	.01	.03	.38	.41	.85	.06	.03	6.0

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'28", long 75°15'33", Gloucester County, Hydrologic Unit 02040202, on right bank 25 ft (8 m) downstream from county bridge No. 5-F-3 on Harrisonville-Gibbstown Road, 1.8 mi (2.9 km) west of Mullica Hill, and 2.8 mi (4.5 km) east of Swedesboro.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: Water years 1966 to current year.
CHEMICAL ANALYSES: Water years 1965 to current year.
SEDIMENT ANALYSES: Water years 1966-69, 1971-73.

PERIOD OF DAILY RECORD.--
WATER DISCHARGE: May 1966 to current year.
WATER TEMPERATURES: May 1966 to September 1973.
SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

GAGE.--Water-stage recorder. Datum of gage is NGVD. Prior to July 28, 1969, at datum 7.96 ft (2.426 m) higher. July 28, 1969 to Sept. 30, 1969, at datum 5.96 ft (1.817 m) higher.

REMARKS.--Discharge records fair.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--11 years, 42.4 ft³/s (1.201 m³/s), 19.26 in/yr (489 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 295 ft³/s (8.35 m³/s) Mar. 22, gage height, 10.38 ft (3.164 m), no peak above base of 300 ft³/s (8.50 m³/s); minimum, 7.4 ft³/s (0.21 m³/s) July 24, gage height, 6.57 ft (2.003 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,530 ft³/s (100 m³/s) Aug. 10, 1967, elevation, 17.44 ft (5.316 m), present datum; minimum daily, 2.9 ft³/s (0.082 m³/s) July 14, Aug. 27, 28, Sept. 10, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	44	22	34	22	37	23	22	14	13	16	23
2	20	32	22	25	20	35	42	20	15	12	15	16
3	19	30	20	21	19	33	62	19	14	11	11	14
4	18	28	20	18	20	36	37	19	13	11	12	14
5	17	28	20	18	22	38	80	22	13	11	13	14
6	16	26	20	19	26	33	59	23	14	11	14	34
7	16	25	59	19	23	31	47	23	16	14	15	16
8	18	23	58	24	20	29	39	19	14	15	14	12
9	44	23	31	22	19	28	39	18	45	13	14	12
10	36	23	27	60	26	28	34	18	31	12	42	14
11	24	23	26	75	44	28	30	18	20	12	51	12
12	21	22	25	40	50	28	28	18	18	15	19	12
13	21	22	24	32	49	29	25	17	15	21	16	12
14	20	23	21	25	36	37	24	15	14	16	18	12
15	20	25	20	27	31	31	23	15	15	13	19	12
16	19	26	21	26	28	28	22	14	15	12	16	13
17	19	26	21	21	24	27	22	14	14	12	18	18
18	20	25	20	20	23	38	21	14	14	11	21	17
19	20	22	20	20	22	44	21	14	14	11	18	15
20	30	22	21	19	21	33	20	14	13	11	16	17
21	73	24	28	19	21	32	20	14	13	11	15	16
22	35	23	22	18	24	128	19	12	12	11	16	16
23	30	22	20	17	31	105	18	12	12	9.6	16	17
24	24	22	20	18	56	45	20	12	11	8.5	22	18
25	28	22	19	19	180	36	36	13	12	9.9	26	20
26	131	23	23	20	56	31	32	14	14	13	19	17
27	56	24	24	18	44	29	24	12	13	11	17	16
28	35	21	21	20	38	28	21	12	12	11	17	21
29	31	27	20	28	---	28	26	12	34	11	17	14
30	28	26	21	27	---	26	24	12	16	12	17	12
31	48	---	20	24	---	24	---	13	---	13	22	---
TOTAL	963	752	756	793	996	1163	938	494	490	378.0	582	476
MEAN	31.1	25.1	24.4	25.6	35.6	37.5	31.3	15.9	16.3	12.2	18.8	15.9
MAX	131	44	59	75	180	128	80	23	45	21	51	34
MIN	16	21	19	17	19	24	18	12	11	8.5	11	12
CFSM	1.04	.84	.82	.86	1.19	1.25	1.05	.53	.55	.41	.63	.53
IN.	1.20	.94	.94	.99	1.24	1.45	1.17	.61	.61	.47	.72	.59

CAL YR 1976 TOTAL 12566.0 MEAN 34.3 MAX 325 MIN 12 CFSM 1.15 IN 15.63
WTR YR 1977 TOTAL 8781.0 MEAN 24.1 MAX 180 MIN 8.5 CFSM .81 IN 10.92

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI-FORM .7UM-MF (COL./100 ML)	FECAL COLI-FORM (EC BROTH) (MPN)
NOV 16...	1445	E26	198	7.5	5.0	5	12.6	.7	156	20
JAN 27...	1345	10	212	7.3	.5	5	15.4	--	832	7
APR 12...	0930	29	163	7.5	14.0	6	9.8	1.6	220	<2
MAY 12...	0915	10	185	7.4	12.5	5	10.5	1.4	8710	1600
JUN 14...	1515	14	198	7.7	20.0	2	8.4	.9	970	540
JUL 13...	0915	22	194	7.9	22.0	4	7.3	1.7	--	490
AUG 09...	1400	15	214	7.8	25.5	4	10.6	1.7	--	140

DATE	FECAL STREP-TOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREP-TOCOCCI (MPN)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV 16...	--	<20	69	38	21	4.1	5.5	3.6	38
JAN 27...	858	5	66	38	20	3.9	7.0	3.5	34
APR 12...	8450	46	72	50	21	4.7	4.1	3.1	27
MAY 12...	320	240	70	46	21	4.3	4.5	3.5	29
JUN 14...	710	130	64	28	20	3.5	7.1	3.6	44
JUL 13...	--	2400	67	35	21	3.6	4.4	3.7	39
AUG 09...	--	130	72	26	23	3.6	9.0	4.4	56

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOL-VED SUL-FIDE (S) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV 16...	0	31	1.9	--	28	12	--	124	7
JAN 27...	0	28	2.7	--	31	15	--	116	4
APR 12...	0	22	1.4	--	30	11	--	138	9
MAY 12...	0	24	1.8	.0	26	12	9.4	161	15
JUN 14...	0	36	1.4	--	26	13	--	120	4
JUL 13...	0	32	.8	--	25	11	--	126	50
AUG 09...	0	46	1.4	--	21	15	--	130	7

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	--	--	--	--	1.4	--	.09	--	2.2
JAN 27...	--	--	--	--	1.4	--	.10	--	1.6
APR 12...	--	--	--	--	1.7	--	.06	--	1.6
MAY 12...	--	--	--	--	1.3	--	.07	--	6.3
JUN 14...	--	--	--	--	1.1	--	.03	--	6.0
JUL 13...	.03	.01	.06	.32	.38	1.2	.24	.05	7.2
AUG 09...	1.2	.02	.01	.41	.42	1.6	.22	.16	5.8

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 12...	0915	40	1	0	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 12...	130	5	60	.0	20	0	20	0

01477510 OLDMANS CREEK AT PORCHES MILL, NJ

LOCATION.--Lat 39°41'57", long 75°20'01", Salem County, Hydrologic Unit 02040206, at bridge on Kings Highway, 150 ft (46 m) downstream from confluence with tributary from outflow of lake at Porches Mill, 1.0 mi (1.6 km) north of Seven Stars, and 2.1 mi (3.3 km) southeast of Auburn.

DRAINAGE AREA.--21.0 mi² (54.4 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	1205	218	7.5	5.0	5	11.5	1.4	2400	9	B100	8	79
JAN 27...	1115	230	6.9	.0	5	12.0	--	210	94	52	17	83
APR 07...	1220	172	7.2	11.0	7	7.1	1.1	42	--	42	--	62
MAY 12...	1130	194	7.6	15.0	6	8.7	1.9	150	23	120	240	100
JUN 14...	1330	172	7.7	22.0	15	7.0	3.0	B240	220	1400	22	71
JUL 07...	1230	216	7.4	22.0	3	5.7	2.7	--	1600	--	280	80
AUG 09...	1215	209	8.4	26.0	9	7.5	1.7	--	79	--	350	85

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	51	23	5.2	4.1	3.8	34	0	28	1.7	--	32	14
JAN 27...	71	24	5.7	5.1	3.5	15	0	12	3.0	--	31	16
APR 07...	46	17	4.7	3.4	3.4	20	0	16	2.0	--	29	11
MAY 12...	68	30	6.9	4.0	3.3	39	0	32	1.6	.0	27	14
JUN 14...	35	21	4.4	4.0	3.4	44	0	36	1.4	--	22	14
JUL 07...	44	25	4.2	3.4	4.0	44	0	36	2.8	--	25	14
AUG 09...	28	26	4.8	4.3	4.0	70	0	57	.4	--	22	16

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	--	136	3	--	--	--	--	1.4	--	.04	--	2.2
JAN 27...	--	138	3	--	--	--	--	1.4	--	.05	--	2.0
APR 07...	--	109	2	--	--	--	--	1.3	--	.08	--	3.7
MAY 12...	9.7	141	11	--	--	--	--	1.4	--	.10	--	6.5
JUN 14...	--	114	44	--	--	--	--	1.1	--	.04	--	6.3
JUL 07...	--	144	33	.94	.03	.13	.60	.73	1.7	.24	.07	6.0
AUG 09...	--	155	16	.90	.02	.06	.49	.55	1.6	.13	.04	6.4

01477510 OLDMANS CREEK AT PORCHES MILL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY 12...	1130	50	1	0	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY 12...	140	9	80	.0	31	0	70	0

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, WILMINGTON, DE

LOCATION.--Lat 39°41'21", long 75°31'19", New Castle County, Hydrologic Unit 02040205, on pier of right tower of downstream bridge of dual bridges at Wilmington, 2.0 mi (3.2 km) downstream from Christina River and at river mile 68.70 (110.54 km).

DRAINAGE AREA.--11,030 mi² (28,570 km²).

PERIOD OF DAILY RECORD.--
TIDE ELEVATIONS: July 1967 to current year. Tidal volumes published from July 1967 to September 1973.
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: January 1968 to current year.
WATER TEMPERATURES: October 1956 to current year.
DISSOLVED OXYGEN: November 1962 to current year.

GAGE.--Water-stage recorder and water-quality monitor. Datum of gage is -10.00 ft (-3.048 m) NGVD. Gage-height record converted to elevation above or below (-) NGVD for publication.

REMARKS.--Records of tide elevations good. Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines. Missing continuous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR CURRENT YEAR.--
TIDE ELEVATION: Maximum, 6.07 ft (1.850 m) Oct. 9; minimum, a-5.1 ft (-1.55 m) Feb. 6.
pH: Maximum, 7.4 Jan. 3-7, 9, 10, 14; minimum, 6.1 Feb. 19.
WATER TEMPERATURES: Maximum, 30.5°C July 18, 19, 21, 22; minimum, 0.0°C Jan. 5, 9-13.
DISSOLVED OXYGEN: Maximum, 12.1 mg/L Jan. 14; minimum, 1.1 mg/L Sept. 29, 30.

EXTREMES FOR PERIOD OF RECORD.--
TIDE ELEVATION: Maximum, 7.45 ft (2.271 m) Dec. 2, 1974; minimum, -5.86 ft (-1.786 m) Apr. 4, 1975.
SPECIFIC CONDUCTANCE: Maximum, 12,700 micromhos Nov. 13, 1966; minimum, 100 micromhos on many days.
pH: Maximum, 9.3 Nov. 10, 11, 13, 1970; minimum, 4.2 Nov. 6, 1969.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 9, 1968; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.5 mg/L Dec. 29, 1969; minimum, 0.0 mg/L on many days during summer months.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 8.4 ft (2.6 m) Nov. 23, 1950, furnished by Corps of Engineers, U.S. Army; minimum, -9.1 ft (-2.8 m) Dec. 31, 1962.

Summaries of tide elevations during current year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	6.07	4.26	--	--	--	--	--	--	--	5.11	4.85	5.74
high tide	Date	9	4,5	--	--	--	--	--	--	--	2	1	26
Minimum	Elevation	-3.40	a-3.65	--	--	--	--	--	--	--	-2.87	-2.28	-2.63
low tide	Date	22	23	--	--	--	--	--	--	--	26	29	14
Mean high tide		3.88	--	--	--	--	--	--	--	--	3.81	3.97	4.32
Mean water level		1.20	--	--	--	--	--	--	--	--	1.00	1.15	1.60
Mean low tide		-1.63	--	--	--	--	--	--	--	--	-1.95	-1.77	-1.24

a- Estimated by comparison with Delaware River at Chester, PA (station 01477050).

NOTE.--No gage-height record Nov. 20 to Dec. 2, Dec. 10 to June 28.

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5860	2550	4280	---	---	---	2550	354	1130			
2	6160	2600	4280	---	---	---	1750	400	882			
3	6290	2200	4120	3220	1870	2340	1050	268	609			
4	6270	2260	4050	3220	1860	2320	1430	330	737			
5	6760	2260	4130	3210	1890	2280	1180	320	689			
6	6760	1010	3600	2490	1910	2090	1380	374	824			
7	5790	1000	3380	2390	1960	2080	1900	432	948			
8	7040	2240	5140	2360	2000	2080	1230	300	666			
9	7690	1150	4150	3330	2020	2220	802	290	465			
10	6760	2090	4590	2700	1980	2240	940	296	447			
11	6420	4000	4700	2600	2000	2220	500	302	366			
12	4760	4010	4350	3470	2030	2380	642	306	395			
13	4780	4010	4370	2660	2050	2290	528	314	359			
14	4760	4300	4480	3470	2050	2390	650	316	375			
15	4710	4000	4440	3240	2090	2450	572	318	404			
16	4540	4240	4380	---	---	---	624	332	440			
17	4680	4000	4420	---	---	---	724	348	488			
18	4570	3000	4310	---	---	---	682	328	443			
19	---	---	---	---	---	---	998	328	487			
20	---	---	---	---	---	---	1260	330	609			
21	---	---	---	---	---	---	914	298	462			
22	---	---	---	1810	430	817	688	292	390			
23	---	---	---	2230	430	1110	846	304	476			
24	---	---	---	2340	460	1150	800	310	487			
25	---	---	---	2480	510	1300	1020	316	619			
26	---	---	---	2380	550	1380	1020	262	601			
27	4960	2040	2630	2640	500	1430	1170	324	605			
28	3110	1970	2320	3120	580	1490	1140	348	666			
29	2910	1960	2240	2540	610	1460	---	---	---			
30	2640	1970	2270	2190	500	1240	---	---	---			
31	---	---	---	---	---	---	---	---	---			
MONTH	7690	1000	3940	3470	430	1850	2550	262	574			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	1610	340	704	190	170	179	540	250	285
2	---	---	---	600	300	379	230	180	189	610	250	306
3	---	---	---	---	---	---	230	170	185	510	250	303
4	8490	2740	5430	---	---	---	200	180	186	560	250	354
5	10400	2760	6190	---	---	---	210	160	179	830	250	421
6	7220	1900	4180	---	---	---	180	150	164	990	250	468
7	8100	2730	5140	270	210	233	170	150	159	1100	260	465
8	8290	3190	5630	260	180	218	170	140	153	850	260	455
9	10000	3900	6720	260	170	212	170	150	153	420	250	298
10	9890	4230	6940	270	160	203	170	140	151	1180	260	457
11	10200	4000	7800	230	160	192	170	150	151	1170	260	610
12	10200	4430	7280	230	160	187	160	140	152	1500	250	593
13	11100	4520	7910	250	160	192	160	150	157	1450	250	586
14	10900	4380	7500	200	150	172	170	160	162	1630	260	659
15	10500	3790	6730	---	---	---	180	160	169	2240	260	698
16	9440	3070	5970	---	---	---	180	170	171	1980	270	794
17	9100	3240	5980	---	---	---	190	170	177	2050	260	814
18	9990	3360	6250	---	---	---	200	170	182	1840	270	833
19	10100	3790	6600	---	---	---	200	180	185	2240	310	1030
20	10500	3920	6940	---	---	---	220	190	195	2520	310	1100
21	9070	3330	6400	---	---	---	230	110	199	2100	250	1030
22	9060	3620	6130	---	---	---	310	200	217	2950	260	1050
23	8100	3410	5690	---	---	---	280	210	225	2380	260	1070
24	8880	3890	6530	---	---	---	310	220	245	2320	200	1120
25	7460	790	4450	---	---	---	300	230	255	2480	200	1160
26	3940	720	1970	---	---	---	300	210	251	2430	340	1360
27	3170	530	1480	---	---	---	260	230	238	2550	350	1440
28	1590	390	857	---	---	---	250	230	238	3880	450	1620
29	---	---	---	---	---	---	270	240	246	4540	550	1880
30	---	---	---	---	---	---	390	240	259	4070	390	2130
31	---	---	---	---	---	---	---	---	---	4670	710	2200
MONTH	11100	390	5710	1610	150	269	390	110	192	4670	200	890

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4860	870	2560	8230	2170	4810	8990	3150	5730	6590	2670	4560
2	5180	840	2680	8140	2320	4850	7430	2900	5030	6210	2650	4410
3	5380	790	2630	8330	2440	4930	7480	2920	5110	6140	2590	4290
4	5870	1020	2930	8130	2610	5090	7260	2920	5080	6140	2860	4410
5	5260	1110	3080	7880	2610	5090	7080	2910	4880	6150	3090	4510
6	5600	1460	3550	7760	3010	5500	6960	3040	4770	6320	2940	4360
7	5630	1550	3610	7870	3200	5550	6760	3000	4680	6450	2880	4310
8	5210	1660	3620	8090	3520	5600	6820	3110	4710	7090	2870	4480
9	5280	1800	3540	8240	3430	5530	6730	2750	4580	7400	3130	4730
10	4990	1310	3130	8520	3420	5550	6680	3100	4600	7350	2990	4810
11	5130	1410	3300	8680	3490	5690	7010	2760	4460	6880	2720	4590
12	6360	1450	3280	7270	2970	5210	6880	2770	4450	7500	3000	4940
13	7360	1510	3360	6070	2570	4350	7340	2660	4430	8300	3170	5390
14	6730	1470	3450	5960	2360	4000	7120	2410	4300	8040	2830	5310
15	6460	1560	3570	7120	2330	4020	6350	2150	3940	7170	2920	4940
16	6640	1610	3820	6740	2460	4210	6390	2320	4250	7870	3300	5370
17	7510	1930	4230	6740	2440	4250	6930	2140	4310	7870	3340	5490
18	8120	2090	4370	6570	2470	4300	6120	2130	4020	8210	3420	5520
19	8360	2180	4560	6370	2420	4390	6270	2230	4140	8060	3540	5620
20	7860	2370	4800	6400	2680	4470	6940	2430	4490	7900	3290	5310
21	7730	2390	4710	6870	2710	4670	7700	2570	4760	7680	3440	5400
22	7360	2350	4730	6350	2510	4570	6580	2720	4680	7990	3530	5500
23	7170	2380	4740	6940	2770	4730	6410	2320	4100	7760	3180	5210
24	7250	2510	4940	7500	2990	4960	6310	2490	4230	7410	2690	4940
25	8030	2720	4930	6930	3110	4970	7170	2200	3930	7390	2720	5010
26	8010	2450	4850	6490	2610	4400	6880	2170	3980	7130	2370	4700
27	8970	2580	5020	7050	2880	4550	6890	2210	4110	6020	1180	3290
28	9450	2690	5170	7790	2960	4690	7810	2200	4200	4440	560	2090
29	7800	2140	4770	7300	3010	4920	6810	2140	4210	2870	460	1440
30	8150	2110	4620	8690	3160	5310	6440	2360	4320	2630	500	1350
31	---	---	---	8970	3220	5510	6540	2520	4480	---	---	---
MONTH	9450	790	3950	8970	2170	4860	8990	2130	4480	8300	460	4540
YEAR	11100	110	2990									

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.0	6.7	6.9	---	---	---	7.0	6.8	6.9	7.2	7.0	7.1
2	7.0	6.8	6.9	---	---	---	7.0	6.8	6.9	7.3	7.0	7.2
3	7.0	6.8	6.9	6.8	6.7	6.7	7.0	6.8	6.9	7.4	7.2	7.3
4	7.0	6.8	6.9	6.7	6.6	6.7	7.1	6.8	6.9	7.4	7.1	7.3
5	6.9	6.8	6.9	6.7	6.6	6.7	7.0	6.8	6.9	7.4	7.1	7.3
6	6.9	6.7	6.8	6.7	6.6	6.7	7.1	6.8	6.9	7.4	7.1	7.2
7	6.9	6.7	6.8	6.7	6.6	6.7	7.1	6.8	7.0	7.4	7.1	7.2
8	6.8	6.6	6.7	6.7	6.6	6.7	7.0	6.7	6.9	7.3	7.0	7.2
9	7.2	6.6	6.8	6.8	6.7	6.7	7.0	6.7	6.8	7.4	7.1	7.2
10	6.9	6.7	6.8	6.8	6.7	6.8	7.0	6.7	6.9	7.4	7.2	7.3
11	6.8	6.6	6.7	6.8	6.6	6.7	6.9	6.7	6.8	7.3	7.0	7.2
12	6.7	6.6	6.7	6.8	6.7	6.7	6.9	6.7	6.8	7.2	7.0	7.1
13	6.7	6.6	6.7	6.8	6.7	6.7	6.9	6.7	6.8	7.3	7.0	7.1
14	6.8	6.7	6.7	6.8	6.7	6.8	7.0	6.7	6.8	7.4	7.1	7.2
15	6.8	6.7	6.8	6.8	6.7	6.7	7.0	6.8	6.9	7.3	7.0	7.2
16	6.8	6.8	6.8	6.9	6.7	6.8	7.0	6.8	6.9	7.3	7.0	7.2
17	6.8	6.8	6.8	6.9	6.7	6.8	7.0	6.8	6.9	7.2	6.9	7.1
18	6.8	6.8	6.8	6.9	6.8	6.9	7.0	6.8	6.9	7.2	6.9	7.1
19	6.9	6.8	6.8	7.0	6.8	6.9	7.0	6.8	6.9	7.1	6.9	7.0
20	6.9	6.8	6.8	7.0	6.8	6.9	7.0	6.9	6.9	7.2	7.0	7.1
21	6.9	6.7	6.8	7.0	6.8	6.9	7.0	6.9	6.9	7.2	7.0	7.1
22	6.9	6.6	6.8	7.0	6.8	6.9	7.2	6.9	7.0	7.2	6.9	7.1
23	6.8	6.6	6.7	7.0	6.7	6.9	7.3	7.0	7.1	7.2	6.9	7.1
24	6.8	6.6	6.7	7.0	6.8	6.9	7.3	7.0	7.1	7.3	7.0	7.1
25	6.7	6.5	6.6	7.1	6.8	6.9	7.3	7.0	7.2	7.3	7.0	7.1
26	6.7	6.6	6.6	7.0	6.8	6.9	7.3	7.1	7.2	7.2	7.0	7.1
27	6.7	6.5	6.6	7.0	6.8	6.9	7.3	7.0	7.2	7.2	7.0	7.1
28	6.7	6.5	6.6	7.0	6.8	6.9	7.3	7.1	7.2	7.2	7.0	7.1
29	6.7	6.6	6.6	7.0	6.8	6.9	7.3	7.1	7.2	7.1	6.9	7.0
30	6.7	6.6	6.6	6.9	6.8	6.8	7.3	7.0	7.2	7.0	6.9	7.0
31	---	---	---	---	---	---	7.2	7.0	7.1	7.1	6.9	7.0
MONTH	7.2	6.5	6.8	7.1	6.6	6.8	7.3	6.7	7.0	7.4	6.9	7.1

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	6.8	6.9	6.8	6.7	6.8	6.9	6.8	6.8	6.8	6.7	6.7
2	7.1	6.9	7.0	6.8	6.8	6.8	6.9	6.8	6.8	6.8	6.7	6.7
3	7.2	6.9	7.0	---	---	---	6.9	6.8	6.8	6.7	6.7	6.7
4	7.3	6.9	7.1	---	---	---	6.9	6.9	6.9	6.7	6.6	6.7
5	7.3	7.0	7.1	---	---	---	7.0	6.9	6.9	6.7	6.6	6.6
6	7.2	6.9	7.0	---	---	---	7.0	6.8	6.9	6.8	6.6	6.7
7	7.2	6.9	7.1	6.7	6.7	6.7	7.0	6.9	7.0	6.8	6.7	6.8
8	7.2	6.9	7.1	6.7	6.7	6.7	7.0	6.9	7.0	6.8	6.7	6.8
9	7.3	7.0	7.1	6.8	6.7	6.7	7.0	6.9	6.9	6.9	6.7	6.8
10	7.3	7.0	7.1	6.8	6.7	6.7	7.0	6.8	6.9	7.0	6.8	6.9
11	7.2	6.9	7.1	6.8	6.7	6.7	6.9	6.8	6.9	7.0	6.8	6.9
12	7.2	7.0	7.1	6.8	6.7	6.7	6.9	6.8	6.8	7.0	6.8	6.9
13	7.2	6.9	7.1	6.8	6.7	6.8	6.9	6.8	6.8	7.0	6.8	6.9
14	7.2	6.9	7.0	6.8	6.6	6.7	6.9	6.8	6.9	7.0	6.8	6.9
15	7.2	6.9	7.0	6.7	6.5	6.6	6.9	6.8	6.9	7.0	6.8	6.9
16	7.1	6.8	7.0	6.8	6.6	6.7	6.9	6.8	6.9	7.0	6.8	6.9
17	7.1	6.8	6.9	6.8	6.7	6.8	6.9	6.8	6.9	7.0	6.8	6.9
18	7.1	6.8	6.9	6.8	6.7	6.8	6.9	6.8	6.9	7.0	6.8	6.9
19	7.1	6.1	6.9	6.8	6.7	6.8	6.9	6.8	6.8	7.0	6.8	6.9
20	7.1	6.8	6.9	6.9	6.6	6.7	6.9	6.8	6.8	7.0	6.8	6.9
21	7.1	6.8	7.0	6.8	6.6	6.7	6.9	6.7	6.8	6.9	6.8	6.9
22	7.1	6.8	7.0	6.8	6.6	6.7	6.8	6.6	6.8	6.9	6.7	6.8
23	7.1	6.8	7.0	6.8	6.7	6.7	6.8	6.7	6.8	6.9	6.7	6.8
24	7.2	6.9	7.0	6.9	6.7	6.8	6.9	6.8	6.8	6.9	6.7	6.8
25	7.1	6.8	6.9	---	---	---	6.9	6.8	6.8	6.9	6.6	6.8
26	6.9	6.7	6.8	---	---	---	6.8	6.7	6.8	6.9	6.6	6.8
27	6.9	6.7	6.8	---	---	---	6.8	6.6	6.7	6.9	6.6	6.8
28	6.8	6.7	6.7	---	---	---	6.8	6.6	6.7	6.9	6.6	6.7
29	---	---	---	---	---	---	6.8	6.6	6.7	7.0	6.6	6.8
30	---	---	---	---	---	---	6.8	6.6	6.7	7.0	6.7	6.8
31	---	---	---	---	---	---	---	---	---	6.9	6.7	6.8
MONTH	7.3	6.1	7.0	6.9	6.5	6.7	7.0	6.6	6.8	7.0	6.6	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.9	6.7	6.8	7.0	6.6	6.8	7.1	6.9	7.0	7.0	6.8	6.9
2	7.0	6.7	6.8	7.0	6.7	6.8	7.1	6.8	6.9	7.0	6.7	6.9
3	7.0	6.7	6.8	7.0	6.7	6.8	7.0	6.8	6.9	7.0	6.7	6.9
4	7.0	6.7	6.9	6.9	6.6	6.8	7.0	6.8	6.9	7.0	6.7	6.9
5	7.0	6.7	6.9	6.9	6.6	6.8	7.0	6.8	6.9	7.0	6.8	6.9
6	7.0	6.7	6.9	6.9	6.6	6.8	7.0	6.8	6.9	7.0	6.8	6.9
7	7.1	6.8	6.9	6.9	6.6	6.8	7.0	6.8	6.9	7.0	6.7	6.9
8	7.1	6.8	7.0	6.9	6.7	6.8	7.0	6.8	6.9	7.0	6.8	6.9
9	7.2	6.9	7.0	6.9	6.6	6.8	7.0	6.8	6.9	7.2	6.8	7.0
10	7.2	6.8	7.0	6.9	6.7	6.8	6.9	6.8	6.9	7.2	6.8	7.0
11	7.2	6.9	7.0	6.9	6.7	6.8	6.9	6.7	6.8	7.1	6.8	7.0
12	7.2	6.9	7.0	6.9	6.7	6.8	6.9	6.7	6.8	7.2	6.9	7.0
13	7.2	6.8	7.0	6.9	6.7	6.8	6.9	6.7	6.8	7.2	6.9	7.1
14	7.2	6.8	7.0	6.9	6.7	6.8	6.9	6.7	6.8	7.3	6.9	7.1
15	7.1	6.7	6.9	7.0	6.7	6.8	6.9	6.7	6.8	7.2	6.9	7.1
16	7.1	6.7	6.9	7.0	6.7	6.8	6.9	6.7	6.8	7.3	6.9	7.1
17	7.1	6.7	6.9	6.9	6.7	6.8	6.9	6.7	6.8	7.2	6.9	7.1
18	7.1	6.7	6.9	6.9	6.6	6.8	6.9	6.7	6.8	7.2	6.9	7.1
19	7.1	6.7	6.9	6.9	6.7	6.8	6.9	6.7	6.8	7.2	6.9	7.1
20	7.1	6.7	6.9	6.9	6.7	6.8	6.9	6.7	6.8	7.2	6.8	7.0
21	7.0	6.7	6.9	6.9	6.7	6.8	6.9	6.7	6.8	7.1	6.9	7.0
22	7.0	6.7	6.8	7.0	6.7	6.9	7.0	6.7	6.9	7.1	6.8	7.0
23	7.1	6.7	6.9	7.1	6.8	6.9	7.1	6.7	6.9	7.1	6.8	6.9
24	7.1	6.7	6.9	7.1	6.8	7.0	7.1	6.8	6.9	7.1	6.7	6.9
25	7.1	6.7	6.9	7.1	6.9	7.0	7.2	6.8	6.9	7.1	6.8	7.0
26	7.1	6.7	6.9	7.2	6.4	7.0	7.1	6.8	6.9	7.1	6.8	7.0
27	7.1	6.7	6.9	7.2	6.9	7.0	7.1	6.8	6.9	7.0	6.6	6.8
28	7.1	6.7	6.8	7.2	6.9	7.0	7.1	6.8	6.9	6.9	6.4	6.6
29	7.0	6.7	6.8	7.2	6.9	7.0	7.1	6.8	6.9	6.7	6.4	6.6
30	7.0	6.7	6.8	7.2	6.9	7.0	7.1	6.8	6.9	6.7	6.4	6.6
31	---	---	---	7.1	6.9	7.0	7.0	6.8	6.9	---	---	---
MONTH	7.2	6.7	6.9	7.2	6.6	6.9	7.2	6.7	6.9	7.3	6.4	6.9
YEAR	7.4	6.1	6.9									

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	18.5	19.0	---	---	---	6.0	4.5	5.0	1.5	0.5	1.0
2	19.0	18.0	18.5	---	---	---	5.5	4.5	5.0	1.5	0.5	1.0
3	19.0	18.0	18.5	9.5	9.5	9.5	5.0	4.0	4.5	1.0	0.5	0.5
4	18.5	18.0	18.5	9.5	9.5	9.5	4.5	3.5	4.0	1.0	0.5	0.5
5	18.5	18.0	18.0	9.5	9.0	9.5	4.5	3.5	4.0	1.0	0.0	0.5
6	18.5	18.0	18.0	9.0	9.0	9.0	4.5	3.0	4.0	1.0	0.5	0.5
7	19.0	18.0	18.5	9.0	8.5	9.0	5.0	3.5	4.0	1.0	0.5	0.5
8	19.0	18.5	18.5	8.5	8.0	8.5	5.0	3.5	4.5	0.5	0.5	0.5
9	19.0	18.5	18.5	8.0	7.0	8.0	5.0	4.0	4.5	0.5	0.0	0.5
10	18.5	18.0	18.5	8.5	7.5	8.0	5.0	4.0	4.5	0.5	0.0	0.5
11	18.0	18.0	18.0	8.0	7.5	8.0	5.0	4.5	4.5	0.5	0.0	0.5
12	18.0	17.0	17.5	8.0	7.0	7.5	5.0	4.0	4.5	0.5	0.0	0.5
13	17.0	17.0	17.0	7.5	7.0	7.0	5.0	4.5	4.5	1.0	0.0	0.5
14	17.0	16.5	17.0	7.5	6.5	7.0	4.5	3.5	4.0	1.0	0.5	0.5
15	16.5	16.0	16.5	7.0	6.5	7.0	4.5	3.5	4.0	1.0	0.5	1.0
16	16.5	16.5	16.5	7.0	6.0	6.5	4.5	3.5	4.0	1.0	0.5	0.5
17	16.0	15.0	15.5	7.0	6.0	6.5	4.5	3.0	4.0	0.5	0.5	0.5
18	15.5	15.0	15.0	7.0	6.0	6.5	4.5	3.5	4.0	1.0	0.5	0.5
19	15.0	14.5	15.0	7.5	6.0	6.5	4.5	3.5	4.0	1.0	0.5	0.5
20	15.0	14.0	14.5	7.0	6.0	6.5	4.5	3.5	4.0	1.0	0.5	0.5
21	14.5	14.0	14.5	7.0	6.0	6.5	4.5	4.0	4.0	1.0	0.5	1.0
22	14.0	13.5	13.5	7.0	5.5	6.5	4.0	2.0	3.5	1.0	0.5	0.5
23	13.5	13.0	13.0	6.5	5.5	6.0	3.5	2.0	3.0	1.0	0.5	1.0
24	13.0	12.0	12.5	6.0	5.0	5.5	3.5	1.5	2.5	1.0	0.5	1.0
25	13.0	12.0	12.5	6.0	5.0	5.5	3.0	1.5	2.0	1.0	0.5	1.0
26	12.5	11.5	12.0	6.0	5.0	5.5	3.0	1.5	2.0	1.0	0.5	1.0
27	11.5	11.0	11.5	6.0	5.0	5.5	3.0	1.5	2.0	1.0	0.5	1.0
28	11.5	10.5	11.0	6.0	5.5	6.0	2.5	1.5	1.5	1.0	0.5	1.0
29	11.0	10.5	10.5	6.5	5.5	6.0	2.5	1.0	1.5	0.5	0.5	0.5
30	10.5	10.0	10.5	6.0	5.0	5.5	2.5	1.0	1.5	1.0	0.5	0.5
31	---	---	---	---	---	---	2.0	1.0	1.5	1.0	0.5	0.5
MONTH	19.5	10.0	15.5	9.5	5.0	7.0	6.0	1.0	3.5	1.5	0.0	0.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	0.5	1.0	5.5	5.0	5.5	10.0	9.5	9.5	18.0	17.0	17.0
2	1.0	0.5	1.0	5.5	5.0	5.5	10.0	9.5	9.5	18.0	17.0	17.5
3	1.0	0.5	1.0	---	---	---	11.0	9.5	10.5	18.5	17.5	18.0
4	1.0	0.5	1.0	---	---	---	11.5	10.0	10.5	18.0	17.5	18.0
5	1.0	0.5	1.0	---	---	---	12.0	10.0	11.0	18.5	17.5	18.0
6	1.0	0.5	0.5	---	---	---	11.5	10.5	11.0	19.0	18.0	18.5
7	1.0	0.5	0.5	7.5	7.0	7.0	11.0	9.5	10.5	19.0	18.5	18.5
8	1.0	0.5	1.0	7.5	6.5	7.0	10.5	9.5	10.0	19.0	18.5	18.5
9	1.0	0.5	1.0	7.5	7.0	7.0	10.0	9.5	9.5	18.5	17.0	18.0
10	1.0	0.5	1.0	8.0	7.0	7.5	10.0	9.5	9.5	17.0	16.5	16.5
11	1.5	1.0	1.0	8.5	7.5	8.0	11.0	9.5	10.0	17.0	16.0	16.5
12	1.5	1.0	1.5	8.5	7.5	8.0	11.5	10.0	11.0	17.5	16.5	17.0
13	1.5	1.0	1.5	9.0	8.0	8.5	12.0	11.0	11.5	18.0	17.0	17.5
14	2.5	1.5	1.5	9.5	8.5	9.0	12.5	11.5	12.0	18.0	17.0	17.5
15	2.5	1.5	2.0	10.0	8.5	9.5	12.5	11.5	12.0	18.5	17.5	18.0
16	2.5	1.5	2.0	11.0	9.5	10.0	13.0	12.0	12.5	18.5	18.0	18.0
17	2.0	1.5	1.5	11.0	10.0	10.5	13.5	12.5	13.0	19.0	18.0	18.5
18	2.0	1.5	1.5	10.5	10.0	10.5	14.0	13.0	13.5	20.0	19.0	19.5
19	2.0	1.5	1.5	10.5	9.0	9.5	14.0	13.5	14.0	20.0	19.5	20.0
20	2.0	1.5	2.0	9.5	9.0	9.5	14.5	13.5	14.0	21.0	20.0	20.0
21	2.0	1.5	2.0	9.5	8.5	9.0	15.0	14.0	14.5	21.5	20.5	21.0
22	3.0	1.5	2.0	9.0	8.5	9.0	16.0	14.5	15.0	22.0	21.0	21.5
23	3.5	2.0	2.5	8.5	8.0	8.5	16.5	15.5	16.0	22.5	21.5	22.0
24	3.5	2.0	3.0	8.0	8.0	8.0	16.5	16.0	16.0	23.0	22.0	22.5
25	4.5	3.0	3.5	---	---	---	17.0	16.0	16.5	23.0	22.5	22.5
26	5.0	4.0	4.5	---	---	---	17.0	16.0	16.5	23.5	22.5	23.0
27	5.5	4.0	5.0	---	---	---	17.0	16.0	16.5	24.0	23.0	23.5
28	6.0	5.0	5.5	---	---	---	17.5	16.5	16.5	24.0	23.0	23.5
29	---	---	---	---	---	---	17.0	16.0	16.5	24.0	23.5	23.5
30	---	---	---	---	---	---	17.5	16.5	17.0	23.5	23.0	23.0
31	---	---	---	---	---	---	---	---	---	23.5	22.5	23.0
MONTH	6.0	0.5	2.0	11.0	5.0	8.5	17.5	9.5	13.0	24.0	16.0	19.5

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	22.5	23.0	26.5	26.0	26.0	27.5	27.0	27.5	28.5	27.0	28.0
2	23.5	22.5	23.0	26.5	26.0	26.0	28.0	27.0	27.5	28.5	27.5	28.0
3	23.5	23.0	23.0	27.0	25.5	26.0	28.0	27.0	27.5	28.5	28.0	28.5
4	23.5	22.5	23.0	26.5	26.0	26.5	28.0	27.0	27.5	28.5	28.0	28.0
5	23.0	22.5	23.0	27.5	26.5	26.5	28.5	27.5	28.0	28.5	28.0	28.0
6	23.0	22.0	22.5	27.5	27.0	27.0	29.0	28.0	28.5	28.5	28.0	28.0
7	22.5	21.5	22.0	27.5	27.0	27.0	29.0	28.5	29.0	28.5	27.5	28.0
8	22.0	21.0	21.5	28.0	27.0	27.0	29.5	28.5	29.0	28.0	27.0	27.5
9	21.5	21.0	21.0	28.0	27.5	27.5	29.5	29.0	29.0	27.5	26.0	27.0
10	21.0	20.5	21.0	28.0	27.5	27.5	29.5	29.0	29.0	27.0	26.0	26.5
11	21.0	20.0	20.5	27.5	27.5	27.5	29.5	29.0	29.0	26.5	25.5	26.0
12	21.5	20.5	21.0	28.0	27.5	27.5	29.5	29.0	29.5	26.0	25.0	25.5
13	22.0	21.0	21.5	28.5	27.5	28.0	29.5	29.0	29.0	25.5	25.0	25.0
14	22.5	21.5	22.0	28.5	28.0	28.0	29.0	28.5	29.0	25.0	24.5	25.0
15	22.5	21.5	22.0	29.0	28.0	28.5	29.0	28.5	28.5	24.5	24.0	24.5
16	23.0	22.0	22.5	29.5	28.5	29.0	29.0	28.5	28.5	24.5	23.5	24.0
17	23.5	22.5	22.5	30.0	29.0	29.5	29.0	28.5	28.5	24.5	23.5	24.0
18	24.0	22.5	23.5	30.5	29.0	29.5	28.5	28.0	28.0	25.0	24.0	24.5
19	24.5	23.5	24.0	30.5	29.5	30.0	28.0	27.5	27.5	25.5	24.5	25.0
20	24.5	24.0	24.0	30.0	30.0	30.0	28.0	27.0	27.5	25.5	24.5	25.0
21	24.5	24.0	24.0	30.5	30.0	30.0	27.5	26.5	27.0	25.0	24.5	24.5
22	24.5	24.0	24.0	30.5	30.0	30.0	27.5	26.5	27.0	24.5	24.0	24.5
23	24.5	24.0	24.0	30.0	28.5	29.5	27.0	26.5	27.0	24.5	24.0	24.0
24	25.0	24.0	24.5	29.5	28.5	29.0	27.0	26.5	27.0	24.5	23.5	24.0
25	24.5	24.5	24.5	29.0	28.0	28.5	27.0	26.0	26.5	24.0	23.0	23.5
26	25.5	24.5	24.5	28.5	27.5	28.0	27.0	26.0	26.5	23.5	23.0	23.0
27	25.5	24.5	25.0	28.0	27.0	27.5	27.0	26.0	26.5	23.5	23.0	23.5
28	26.0	25.0	25.5	28.0	27.0	27.5	27.0	26.0	26.5	23.5	23.0	23.0
29	26.0	25.5	25.5	28.0	27.0	27.5	27.5	26.5	27.0	23.0	22.5	23.0
30	26.0	25.5	26.0	27.5	26.5	27.0	28.0	27.0	27.5	23.0	22.5	22.5
31	---	---	---	27.5	26.5	27.0	28.0	27.0	27.5	---	---	---
MONTH	26.0	20.0	23.0	30.5	25.5	28.0	29.5	26.0	28.0	28.5	22.5	25.5
YEAR	30.5	0.0	15.0									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.4	3.8	4.7	---	---	---	8.7	6.7	7.7	10.4	9.0	9.7
2	5.6	4.6	5.1	---	---	---	8.9	7.4	8.1	11.0	9.3	10.2
3	5.6	4.3	5.1	7.4	6.7	7.1	8.8	6.8	7.9	11.6	9.6	10.5
4	5.8	4.6	5.2	7.1	6.4	6.9	9.4	7.3	8.1	11.5	9.6	10.5
5	5.9	4.7	5.5	7.2	6.5	6.8	8.9	6.9	7.8	11.3	9.7	10.5
6	5.9	4.5	5.2	7.4	6.8	7.1	9.2	6.9	7.9	11.4	9.7	10.6
7	---	---	---	7.6	6.9	7.3	9.3	6.8	8.1	11.4	9.6	10.7
8	---	---	---	7.9	7.2	7.6	9.4	7.0	8.0	11.3	9.7	10.5
9	---	---	---	8.7	7.4	7.9	9.1	6.7	8.0	11.5	9.9	10.8
10	---	---	---	8.1	7.2	7.6	9.2	7.0	8.1	11.5	10.3	11.0
11	---	---	---	8.0	7.1	7.6	8.5	6.8	7.7	11.4	10.0	10.7
12	---	---	---	7.9	6.9	7.5	8.4	6.8	7.5	11.1	9.5	10.3
13	---	---	---	7.8	7.0	7.4	8.2	6.7	7.4	11.8	10.2	10.9
14	---	---	---	7.9	7.1	7.5	10.1	7.0	8.3	12.1	10.4	11.1
15	---	---	---	7.9	7.0	7.4	9.9	7.7	8.8	11.7	10.2	11.0
16	---	---	---	7.8	6.8	7.3	9.8	7.7	8.7	11.6	10.0	10.8
17	---	---	---	7.6	6.7	7.1	10.0	7.5	8.7	11.3	9.6	10.6
18	5.7	5.1	5.4	7.5	6.7	7.2	9.3	7.4	8.4	11.2	9.7	10.5
19	5.7	4.9	5.3	7.9	6.5	7.1	9.4	7.5	8.2	11.1	9.6	10.4
20	6.2	4.9	5.2	7.7	6.3	7.0	9.5	7.5	8.3	11.5	9.7	10.6
21	6.4	5.0	5.5	7.5	6.0	6.8	8.9	7.4	8.2	11.3	9.5	10.4
22	6.1	5.3	5.7	8.1	6.5	7.2	11.1	8.3	9.3	11.1	9.3	10.2
23	6.2	5.4	5.8	8.4	6.6	7.4	11.9	9.3	10.2	11.5	9.4	10.4
24	6.2	5.5	5.8	8.6	6.8	7.6	11.3	9.1	10.3	11.5	9.6	10.6
25	6.1	5.2	5.7	8.6	6.8	7.6	11.9	9.6	10.7	11.3	9.5	10.4
26	6.2	5.4	5.8	8.2	6.6	7.5	11.4	9.6	10.6	11.1	9.3	10.2
27	6.6	5.5	6.1	8.1	6.7	7.4	11.4	9.6	10.6	11.0	9.0	10.1
28	6.3	5.5	5.9	8.0	6.6	7.3	11.6	9.3	10.9	11.2	9.0	10.2
29	6.2	5.6	6.0	7.8	6.4	7.1	11.2	9.3	10.3	10.6	8.3	9.8
30	6.0	5.7	5.9	7.7	6.5	7.1	10.8	8.7	9.7	10.4	8.8	9.7
31	---	---	---	---	---	---	10.2	8.7	9.5	10.7	8.6	9.8
MONTH	6.6	3.8	5.5	8.7	6.0	7.3	11.9	6.7	8.8	12.1	8.3	10.4

01482100 DELAWARE RIVER AT DELAWARE MEMORIAL BRIDGE, NEAR WILMINGTON, DEL--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.5	8.5	9.7	6.5	5.7	6.0	8.9	8.7	8.8	6.5	2.7	4.5
2	11.1	8.7	9.8	7.1	6.0	6.5	8.9	8.4	8.6	6.4	3.2	4.8
3	11.6	9.1	10.3	---	---	---	8.8	8.2	8.4	6.0	3.4	4.7
4	11.5	8.8	10.2	---	---	---	8.5	7.9	8.2	6.1	3.6	4.8
5	11.6	8.9	10.4	---	---	---	8.6	7.7	8.1	5.8	3.6	4.6
6	11.3	7.1	9.9	---	---	---	9.3	7.9	8.6	5.2	3.5	4.5
7	11.6	9.1	10.4	9.1	7.7	8.2	9.4	8.7	9.1	5.2	3.6	4.3
8	11.6	9.2	10.5	9.7	8.0	8.6	9.5	9.1	9.3	5.0	3.7	4.3
9	11.7	9.1	10.5	10.0	8.1	8.8	9.5	9.1	9.3	6.4	4.3	5.0
10	11.4	9.0	10.3	9.9	8.2	9.0	9.4	8.8	9.1	7.2	5.2	6.4
11	11.2	8.7	10.1	9.7	8.4	9.0	9.1	8.6	8.8	7.4	5.9	6.7
12	10.9	8.6	9.8	9.5	8.6	9.0	8.8	8.4	8.6	7.4	5.8	6.5
13	11.0	8.3	9.8	9.2	8.7	9.0	8.5	8.2	8.3	7.2	5.8	6.5
14	10.9	8.1	9.7	9.1	8.1	8.7	8.3	8.0	8.1	7.3	5.9	6.6
15	10.7	7.6	9.3	8.6	7.8	8.1	8.2	7.8	8.1	7.6	5.9	6.6
16	10.6	7.0	8.9	9.0	8.0	8.5	8.1	7.4	7.8	7.3	6.0	6.6
17	10.6	7.1	9.0	9.0	8.7	8.8	7.9	7.1	7.6	7.1	6.3	6.6
18	10.8	7.3	9.1	9.0	8.6	8.7	7.9	6.7	7.3	6.9	6.2	6.5
19	10.7	7.4	9.2	9.0	8.6	8.9	7.4	6.4	7.0	6.8	6.0	6.3
20	10.6	7.4	9.1	9.1	8.7	8.8	7.3	6.1	6.8	6.6	5.7	6.1
21	10.6	7.4	9.2	8.9	8.7	8.8	7.0	5.6	6.5	6.3	5.5	5.8
22	10.8	8.0	9.4	9.1	8.6	8.8	6.7	5.2	6.2	6.4	5.0	5.5
23	10.4	7.8	9.2	9.6	8.9	9.2	6.6	5.2	6.0	5.8	4.5	5.1
24	11.2	8.2	9.8	9.5	9.2	9.4	6.8	5.5	6.2	5.5	4.0	4.7
25	10.5	5.9	8.9	---	---	---	6.9	5.4	6.2	5.3	3.3	4.3
26	8.7	5.5	7.0	---	---	---	6.6	5.0	6.0	5.3	3.0	4.2
27	7.8	5.2	6.3	---	---	---	6.1	3.7	5.3	5.1	2.6	4.0
28	6.5	5.4	5.9	---	---	---	6.0	3.2	5.0	5.3	2.5	3.8
29	---	---	---	---	---	---	5.9	2.8	4.5	6.0	2.8	4.2
30	---	---	---	---	---	---	6.3	2.8	4.5	5.4	3.5	4.5
31	---	---	---	---	---	---	---	---	---	5.5	3.1	4.1
MONTH	11.7	5.2	9.3	10.0	5.7	8.5	9.5	2.8	7.4	7.6	2.5	5.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.4	2.9	4.2	5.4	2.0	3.8	5.5	3.2	4.6	5.1	2.8	4.2
2	5.6	2.9	4.2	5.3	1.8	3.7	5.0	2.6	4.1	5.3	2.8	4.1
3	5.5	2.7	4.2	5.1	2.0	3.7	4.7	2.5	3.9	5.1	2.5	4.0
4	6.0	2.9	4.6	4.9	2.0	3.7	4.5	2.2	3.7	5.5	2.8	4.2
5	5.8	3.1	4.7	4.6	1.7	3.4	4.5	2.3	3.6	5.4	3.1	4.3
6	5.9	3.4	4.9	4.6	1.8	3.5	4.5	2.4	3.6	5.2	2.9	4.1
7	6.3	3.6	5.2	4.2	1.9	3.4	4.6	2.3	3.5	5.5	2.7	4.2
8	6.8	4.1	5.7	4.5	2.1	3.4	4.5	2.6	3.6	5.8	3.4	4.6
9	7.1	4.8	6.1	4.3	1.9	3.2	4.4	2.5	3.5	6.4	3.5	4.9
10	7.1	4.4	5.9	4.5	1.9	3.4	4.4	2.5	3.5	6.3	4.0	5.2
11	7.4	5.1	6.4	4.7	2.5	3.6	4.4	2.4	3.4	6.1	3.7	5.1
12	7.4	5.0	6.4	4.7	2.6	3.7	4.3	2.0	3.3	6.2	4.1	5.4
13	7.4	4.7	6.1	4.4	2.5	3.7	4.4	2.2	3.3	6.6	4.5	5.8
14	7.1	4.2	5.7	4.5	2.2	3.5	4.1	2.1	3.2	6.8	4.8	6.1
15	6.8	3.6	5.2	5.0	2.3	3.6	3.9	1.9	3.1	6.8	4.6	6.0
16	6.4	3.1	4.9	4.7	2.2	3.6	4.2	2.1	3.4	7.4	5.4	6.3
17	6.5	3.0	5.0	4.9	2.2	3.7	4.5	2.4	3.7	7.1	5.0	6.4
18	6.6	2.9	4.9	4.6	2.1	3.6	4.2	2.0	3.4	7.0	4.8	6.2
19	6.4	2.7	4.6	4.6	1.9	3.5	4.5	2.1	3.4	6.8	4.7	6.0
20	6.1	2.7	4.6	4.4	1.9	3.4	4.2	2.1	3.4	6.6	4.2	5.7
21	5.9	2.8	4.6	4.6	1.9	3.4	4.5	2.3	3.6	6.7	4.5	5.8
22	5.9	3.0	4.7	5.0	2.3	3.8	5.0	2.9	4.1	6.6	4.4	5.7
23	6.5	3.2	4.9	5.7	3.1	4.4	5.8	2.5	4.0	6.3	3.5	5.2
24	6.3	3.1	5.0	5.7	3.5	4.7	5.5	3.1	4.4	6.3	2.9	5.0
25	6.1	3.4	4.9	5.8	4.3	5.0	6.1	2.7	4.3	6.8	4.1	5.6
26	6.0	2.7	4.5	5.9	3.8	4.9	6.1	2.8	4.4	6.8	4.4	5.8
27	6.0	2.6	4.3	5.9	4.0	5.0	6.1	2.8	4.6	6.5	2.4	4.8
28	6.0	2.4	4.2	6.1	3.9	5.0	6.2	2.9	4.6	5.6	1.3	3.4
29	5.4	1.9	3.8	6.0	3.6	4.9	5.7	2.8	4.5	4.4	1.1	2.7
30	5.5	2.0	3.8	6.1	3.3	4.7	5.5	2.9	4.5	4.3	1.1	2.6
31	---	---	---	5.7	3.1	4.6	5.3	2.7	4.3	---	---	---
MONTH	7.4	1.9	4.9	6.1	1.7	3.9	6.2	1.9	3.8	7.4	1.1	5.0
YEAR	12.1	1.1	6.6									

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, on right end of Memorial Lake Dam at Woodstown, 0.2 mi (0.3 km) upstream from small brook, and 0.3 mi (0.5 km) downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi² (37.8 km²).

PERIOD OF RECORD.--
WATER DISCHARGE: March to September 1940, December 1941 to current year. Prior to October 1952, published as "Salem Creek at Woodstown".
CHEMICAL ANALYSES: Water years 1973 to current year.

REVISED DISCHARGE RECORDS.--WSP 1432: 1951(M). WSP 1702: 1959.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 29.49 ft (8.989 m) NGVD.

REMARKS.--Discharge records good except those below 10 ft³/s (0.28 m³/s) and those for periods when gate was open, which are fair. Gate open May 27 to June 10 and July 10 to Aug. 1.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

AVERAGE DISCHARGE.--35 years (1942-77), 18.9 ft³/s (0.532 m³/s), 17.58 in/yr (447 mm/yr).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 311 ft³/s (8.81 m³/s) Mar. 22, gage height, 1.77 ft (0.539 m), no peak above base of 350 ft³/s (9.91 m³/s); minimum daily, 2.9 ft³/s (0.08 m³/s) June 23, 24, July 10, 11.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s (623 m³/s) Sept. 1, 1940 (gage height, 7.98 ft or 2.432 m, from floodmark in gage house) from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of slope-area measurement of peak flow at site 0.5 mi (0.8 km) downstream; no flow for short periods during many years just after waste gate was closed and water was below spillway.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	25	11	6.4	7.6	13	8.5	7.4	5.0	4.5	9.0	7.2
2	13	14	11	6.4	7.0	9.6	35	7.4	5.8	4.5	50	6.0
3	16	11	9.6	6.4	6.5	9.6	50	6.4	5.0	4.5	11	5.0
4	13	13	7.4	6.4	6.4	14	22	6.4	4.2	3.7	7.4	4.5
5	8.5	13	6.4	7.4	8.0	16	61	7.4	3.9	3.7	6.4	5.2
6	8.5	11	6.4	6.4	9.6	13	32	8.5	9.6	3.7	5.4	7.6
7	8.5	11	50	7.4	9.0	11	18	8.5	7.5	3.7	5.4	6.5
8	8.5	9.6	35	7.4	7.6	9.6	14	6.4	6.8	3.7	5.4	5.5
9	32	9.6	14	7.4	6.8	9.6	9.4	5.4	24	3.7	5.4	5.4
10	25	9.6	9.6	99	8.8	9.6	9.2	5.4	19	2.9	6.4	5.8
11	13	9.6	9.6	69	14	9.6	8.9	4.5	10	2.9	14	4.9
12	8.5	9.6	9.6	18	22	9.6	8.7	4.5	6.4	11	6.4	4.7
13	8.5	9.6	8.5	9.6	25	13	8.5	4.5	4.5	8.0	6.4	4.5
14	7.4	9.6	7.4	9.6	18	22	8.5	3.7	4.5	6.0	6.4	4.5
15	7.4	9.6	7.4	9.6	14	14	8.2	3.7	5.4	4.9	7.4	3.7
16	7.4	11	8.5	9.6	9.6	11	7.9	3.7	4.5	4.2	7.4	3.7
17	7.4	11	8.5	7.4	8.5	9.6	7.8	3.7	4.5	3.8	8.5	5.4
18	9.6	11	7.4	7.4	7.4	27	7.7	4.5	4.5	3.8	9.6	4.5
19	8.5	9.6	7.4	7.4	7.4	29	7.8	4.5	4.5	3.8	7.4	4.5
20	18	9.6	8.5	7.4	8.5	16	8.1	3.7	3.7	3.7	7.4	4.5
21	61	9.6	13	7.4	7.4	14	8.6	4.5	3.7	3.7	8.5	4.5
22	20	9.6	9.6	6.4	7.4	113	8.9	6.4	3.7	3.7	8.5	4.5
23	13	9.6	7.4	6.4	8.5	65	10	4.5	2.9	3.7	8.5	4.5
24	11	9.6	7.4	6.4	29	25	20	3.7	2.9	3.7	9.6	5.4
25	13	9.6	6.4	6.4	136	16	16	3.7	3.7	6.6	8.5	5.4
26	155	9.6	13	7.4	32	13	25	3.7	5.4	12	8.5	4.5
27	35	11	13	6.4	18	11	20	3.7	4.5	5.0	8.5	4.5
28	18	11	9.6	7.4	16	13	16	3.7	5.4	3.0	8.5	6.4
29	13	16	9.6	11	---	13	12	3.7	6.4	3.1	8.5	5.4
30	13	16	7.4	10	---	11	10	3.7	4.5	3.4	8.5	6.4
31	38	---	7.4	9.0	---	8.5	---	4.2	---	4.8	9.4	---
TOTAL	629.7	338.6	347.0	399.8	466.0	578.3	487.7	155.7	186.4	143.4	288.2	155.1
MEAN	20.3	11.3	11.2	12.9	16.6	18.7	16.3	5.02	6.21	4.63	9.30	5.17
MAX	155	25	50	99	136	113	61	8.5	24	12	50	7.6
MIN	7.4	9.6	6.4	6.4	6.4	8.5	7.7	3.7	2.9	2.9	5.4	3.7
CFSM	1.39	.77	.77	.88	1.14	1.28	1.12	.34	.43	.32	.64	.35
IN.	1.60	.86	.88	1.02	1.19	1.47	1.24	.40	.47	.37	.73	.40

CAL YR 1976 TOTAL 6207.9 MEAN 17.0 MAX 297 MIN 1.1 CFSM 1.16 IN 15.82
WTR YR 1977 TOTAL 4175.9 MEAN 11.4 MAX 155 MIN 2.9 CFSM .78 IN 10.64

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01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM, .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)
NOV 16...	1020	13	240	7.6	4.0	5	13.2	2.2	58	22	40	4
JAN 27...	0950	6.4	276	6.9	.5	4	14.6	--	54	240	120	4
APR 07...	1025	18	216	7.2	9.0	30	8.4	2.7	8670	--	E1300	--
MAY 11...	1130	5.4	209	7.6	8.5	30	14.0	3.8	290	79	84	80
JUN 14...	1020	4.5	237	8.1	22.0	2	7.8	5.8	--	130	780	49
JUL 07...	1015	3.7	237	8.6	26.5	5	7.4	>9.0	--	20	--	13
AUG 09...	1020	5.4	161	8.6	28.0	20	7.2	5.3	--	1700	--	170

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	84	58	18	9.6	6.2	5.8	32	0	26	1.3	39	18
JAN 27...	95	84	20	11	8.4	4.0	13	0	11	2.6	40	23
APR 07...	69	51	15	7.7	5.7	5.4	22	0	18	2.2	36	16
MAY 11...	81	51	19	8.1	5.9	4.5	37	0	30	1.5	32	16
JUN 14...	94	57	23	8.9	6.9	5.8	45	0	37	.6	31	19
JUL 07...	82	38	19	8.4	6.4	5.0	41	6	44	.2	26	19
AUG 09...	53	21	12	5.6	3.9	6.6	37	1	32	.2	23	11

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	146	10	--	--	--	--	1.7	--	.05	--	3.8
JAN 27...	146	5	--	--	--	--	1.7	--	.05	--	2.5
APR 07...	142	48	--	--	--	--	1.7	--	.14	--	6.1
MAY 11...	133	37	--	--	--	--	1.4	--	.14	--	6.5
JUN 14...	151	28	--	--	--	--	1.1	--	.05	--	5.8
JUL 07...	171	35	.01	.00	.27	1.9	2.2	2.2	.21	.03	7.5
AUG 09...	107	39	.01	.01	.03	2.1	2.1	2.1	.19	.04	8.0

01482537 SALEM RIVER AT COURSES LANDING, NJ

LOCATION.--Lat 39°39'38", long 75°24'34", Salem County, Hydrologic Unit 02040206, at bridge on Pointers Auburn Road, 1.6 mi (2.6 km) north of Halltown, and 2.0 mi (3.2 km) northeast of Slapes Corner.

DRAINAGE AREA.--35.8 mi² (92.7 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	1115	278	7.4	4.5	8	8.4	1.4	1400	170	750	110	94
FEB 03...	1000	275	7.0	.0	2	7.8	4.7	8680	<2400	E670	920	93
APR 07...	1115	220	7.3	8.5	20	7.4	3.6	2100	--	3900	--	68
MAY 11...	1220	254	7.7	12.0	25	3.8	3.7	340	230	200	<200	100
JUN 14...	1130	263	7.8	21.0	10	2.9	6.0	8400	200	760	22	87
JUL 07...	1120	315	7.5	26.5	2	4.4	4.6	--	2400	--	70	100
AUG 09...	1115	282	8.0	27.0	6	1.8	7.6	--	<20	--	230	86

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	41	26	7.8	11	5.5	65	0	53	4.1	--	31	21
FEB 03...	40	25	7.3	16	4.4	65	0	53	10	--	33	26
APR 07...	42	17	6.1	8.0	5.0	32	0	26	2.6	--	32	16
MAY 11...	48	28	8.2	11	5.0	63	0	52	2.0	.0	27	19
JUN 14...	29	24	6.5	12	5.2	71	0	58	1.8	--	27	21
JUL 07...	22	29	7.0	15	4.7	95	0	78	4.8	--	22	24
AUG 09...	12	25	5.6	15	6.0	90	0	74	1.4	--	23	21

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	--	165	15	--	--	--	--	1.8	--	.18	--	3.4
FEB 03...	--	183	4	--	--	--	--	2.2	--	.39	--	5.4
APR 07...	--	136	31	--	--	--	--	2.0	--	.17	--	4.8
MAY 11...	9.6	173	25	--	--	--	--	1.4	--	.22	--	6.3
JUN 14...	--	149	19	--	--	--	--	1.4	--	.14	--	6.4
JUL 07...	--	186	29	.70	.05	.95	.95	1.9	2.7	.24	.04	6.5
AUG 09...	--	184	35	.57	.05	.81	1.4	2.2	2.8	.32	.05	7.2

01482537 SALEM RIVER AT COURSES LANDING, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
11...	1220	20	4	10	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
11...	110	14	140	.0	5	0	20	0

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL

LOCATION.--Lat 39°30'03", long 75°34'07", New Castle County, water-quality recorder located on platform about 0.4 mi (0.6 km) downstream from Reedy Island near Fort Penn.

DRAINAGE AREA.--11,200 mi² (29,100 km²), approximately.

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1964 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1963 to current year.
pH: February 1970 to current year.
WATER TEMPERATURES: October 1969 to current year.
DISSOLVED OXYGEN: February 1970 to current year.

REMARKS.--Missing continous water-quality records are the result of malfunction of sensor or sampling mechanism.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 22,000 micromhos Feb. 25; minimum 200 micromhos on several days in March and April.
pH: Maximum 8.6 Feb. 25; minimum 6.6 Mar. 16, 17.
DISSOLVED OXYGEN: Maximum 17.1 mg/L Dec. 16, 19; minimum 4.2 mg/L July 9.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 35,400 micromhos Nov. 7, 1963; minimum, 100 micromhos on several days.
pH: Maximum, 8.8 Aug. 29, Sept. 2, 1973; minimum, 5.4 Dec. 31, 1972.
WATER TEMPERATURES: Maximum, 29.5°C Aug. 5, 1975; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L Dec. 16, 19, 1976; minimum, 0.3 mg/L Sept. 16,17, 1971.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16600	9760	12400	4440	1800	2840	12400	4000	6950			
2	18400	10800	14100	7200	1920	3940	11800	4440	6600			
3	17000	9880	13600	7640	2200	3930	7920	2160	4520			
4	17900	10100	13500	7200	2280	3670	9400	3600	5040			
5	17000	10000	13800	5800	2160	3550	8840	3200	4660			
6	17600	10000	13100	4600	1960	2830	11200	3920	5980			
7	16200	9920	12400	3120	1200	2000	13200	4720	7390			
8	16300	9640	11900	5200	1160	2250	9800	4000	5890			
9	18700	10200	13100	8960	1760	3860	9160	3640	5060			
10	11300	6080	9050	6600	1400	3200	7960	3200	4480			
11	9360	5360	6990	4800	2800	---	4200	2160	3270			
12	10000	5120	6400	---	---	---	8040	2360	3850			
13	10500	5080	6650	---	---	---	6840	1640	3550			
14	7520	4560	5580	---	---	---	7600	1760	3450			
15	9800	4000	5870	---	---	---	5760	1920	3110			
16	8320	2920	4990	11000	3640	6830	9000	1880	4250			
17	12300	3600	6370	11200	4000	6530	11000	3240	6080			
18	13200	5240	8090	10300	4360	6130	8960	3160	4770			
19	14400	4800	8660	11800	4160	6310	8440	2960	4260			
20	15200	[illegible]	8700	12200	4320	6440	10600	3200	5080			
21	14400	5400	8000	11600	4360	6040	6960	3360	4540			
22	6440	3800	5250	9200	3640	5320	---	---	---			
23	6440	2840	4350	6960	3360	4500	---	---	---			
24	7000	2800	4140	8760	3200	4430	---	---	---			
25	7160	2800	4050	8960	3240	4760	---	---	---			
26	5360	2600	3650	8560	3600	5110	---	---	---			
27	7760	2360	4010	9080	3760	5140	---	---	---			
28	7000	2200	3530	8800	3800	5290	---	---	---			
29	5000	2160	3040	9000	4160	5690	---	---	---			
30	6560	2000	3210	9760	4040	5760	---	---	---			
31	7360	2160	4030	---	---	---	---	---	---			
MONTH	18700	2000	7820	12200	1160	4650	13200	1640	4890			

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	14400	5360	10100	4440	200	1940	5640	400	2390
2	---	---	---	13000	3200	7860	4360	200	1650	5000	760	2590
3	---	---	---	12300	2560	6700	2320	200	883	4680	600	2080
4	---	---	---	13400	2960	7260	960	200	387	5400	800	2530
5	---	---	---	10800	2720	6080	1600	200	522	5880	1400	3110
6	---	---	---	7200	1360	3290	1160	440	866	5960	1760	3430
7	---	---	---	4200	720	2080	1200	800	990	5800	1800	3300
8	---	---	---	3000	200	1370	1240	1000	1160	4840	1800	3210
9	---	---	---	2800	200	932	1360	1200	1220	3600	1240	2130
10	---	---	---	2040	200	445	1400	1200	1270	9960	1200	5010
11	---	---	---	1360	200	313	1360	1200	1260	12300	3240	6810
12	---	---	---	1240	200	273	1400	1200	1300	11300	3840	6440
13	---	---	---	3240	200	677	1400	1200	1330	11800	3960	6360
14	---	---	---	960	200	475	1360	400	1200	13400	4000	6680
15	---	---	---	1320	520	958	1600	560	1120	12400	4200	6610
16	---	---	---	1360	1000	1210	1320	200	963	12400	4360	6560
17	---	---	---	1320	1200	1210	3240	280	1060	11700	4000	5650
18	---	---	---	1320	1200	1210	3000	200	775	10000	3720	5360
19	---	---	---	1360	1200	1230	2360	200	648	11100	4080	6120
20	---	---	---	1320	840	1200	2600	200	597	12800	4520	7120
21	---	---	---	1360	1200	1270	2400	200	577	10600	4440	5990
22	---	---	---	1320	560	1180	2200	200	428	8920	4400	5550
23	17600	11600	14200	1400	1200	1340	2280	200	468	8720	4360	5450
24	21800	12000	16500	1400	200	1260	3480	200	1060	8840	4640	5590
25	22000	7600	14700	1760	200	903	4000	200	1720	8520	4560	5800
26	15400	7400	11100	6000	560	3460	5000	280	2690	9800	4520	6070
27	14900	7680	11000	8840	2720	5310	4400	200	1790	10700	4800	6560
28	14200	6600	10300	8560	2960	5440	4600	200	1770	13200	5120	7200
29	---	---	---	8600	2160	4700	4960	200	1880	13600	5200	7300
30	---	---	---	6800	1600	3950	5400	200	2220	14300	5280	8110
31	---	---	---	8040	1400	3750	---	---	---	13400	5480	7830
MONTH	22000	6600	13000	14400	200	2820	5400	200	1190	14300	400	5320

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13800	5520	8050	17600	8400	11400	20400	11000	14300	13800	7520	10300
2	14000	5560	8030	16800	8160	11200	17600	9960	12700	13400	7120	9890
3	14600	5840	8100	17000	8400	11300	17900	10200	12800	12400	6360	8930
4	13800	5960	8630	17400	8720	11800	17400	9800	13100	14600	6960	9820
5	14000	6040	8860	15600	8440	11000	17000	9960	12800	14200	8160	11800
6	14500	6160	9590	15600	8560	11700	17000	9640	12600	13900	8000	10200
7	15000	6920	10800	16000	8960	12000	17600	9200	12600	14200	7520	10100
8	16200	7360	11200	16400	9120	12400	16800	7560	11900	15000	7920	10900
9	15600	7520	10600	16400	9200	12000	15000	7560	11000	15600	8840	11400
10	16200	6960	10200	18000	9560	12500	16000	7360	11400	16000	9000	11700
11	18400	7960	12600	16800	9800	12800	16400	7760	11400	15200	8960	11300
12	18600	7880	12300	15800	10000	12400	17200	7600	11700	16000	9000	11700
13	17900	7800	11800	16000	8040	11100	17400	8040	11600	16200	9640	12300
14	17800	7720	11700	16000	7640	10100	17200	7760	11100	15100	7240	10800
15	17300	8200	11800	16200	7920	10800	15600	7000	9930	14800	7360	9800
16	18000	8520	11900	17000	8400	11400	16000	7520	11100	14800	8160	11000
17	18400	8520	12500	17200	8600	11200	16400	8000	11200	15200	8360	11000
18	18200	9200	12100	16400	7920	11000	15100	7200	10100	15200	8200	11000
19	17100	8880	11800	16400	8160	11500	15200	7400	10500	15000	8560	11100
20	17600	8800	12300	17900	8800	12300	15600	7800	11200	15000	8560	11000
21	17000	8800	11700	17200	9000	12300	16200	8160	11300	15800	8560	11500
22	17400	8880	12200	16700	9000	12100	14800	8440	11100	16000	8960	11800
23	16200	8720	12000	20400	9200	14300	14700	6400	9310	15400	9000	11400
24	17500	9360	12800	20800	10400	14500	14800	7000	10100	14000	8720	10900
25	17100	9680	12400	17100	9400	12500	15800	7000	9550	15200	8840	11200
26	17000	9080	12100	17800	6840	10200	15400	7400	10100	15200	8160	11200
27	18400	9080	12400	19900	8000	11800	14700	7600	10000	12600	6800	9180
28	18600	9760	12600	20000	9360	12800	14800	7240	9690	10300	4960	7340
29	17400	9200	12100	20300	10000	13100	14200	6960	9280	9960	4440	6340
30	17400	8560	11400	20800	10300	13800	13400	6720	9220	10000	4400	6210
31	---	---	---	20800	10700	14300	14600	6960	9820	---	---	---
MONTH	18600	5520	11200	20800	6840	12100	20400	6400	11100	16200	4400	10400
YEAR	22000	200	7390									

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.6	7.4	7.5	7.2	7.0	7.1	7.7	7.4	7.5			
2	7.6	7.5	7.5	7.4	7.0	7.2	7.7	7.4	7.5			
3	7.6	7.4	7.5	7.4	7.0	7.1	7.6	7.4	7.5			
4	7.6	7.4	7.5	7.3	7.0	7.1	7.6	7.4	7.5			
5	7.6	7.4	7.5	7.3	7.0	7.1	7.6	7.4	7.4			
6	7.6	7.3	7.4	7.2	7.0	7.1	7.6	7.4	7.5			
7	7.5	7.3	7.4	7.3	7.0	7.1	7.7	7.4	7.5			
8	7.4	7.2	7.3	7.3	7.1	7.2	7.6	7.4	7.5			
9	7.5	7.3	7.4	7.5	7.1	7.3	7.6	7.3	7.4			
10	7.5	7.3	7.4	7.4	7.1	7.2	7.5	7.3	7.4			
11	7.5	7.3	7.4	7.3	7.2	7.2	7.4	7.2	7.3			
12	7.4	7.1	7.3	---	---	---	7.5	7.2	7.3			
13	7.4	7.1	7.3	---	---	---	7.5	7.2	7.4			
14	7.6	7.1	7.3	---	---	---	7.6	7.2	7.4			
15	7.4	7.1	7.3	---	---	---	7.5	7.3	7.4			
16	7.5	7.2	7.4	7.6	7.3	7.4	7.6	7.3	7.4			
17	7.5	7.2	7.4	7.6	7.3	7.4	7.6	7.3	7.4			
18	7.6	7.3	7.4	7.6	7.3	7.4	7.6	7.3	7.4			
19	7.6	7.3	7.4	7.6	7.3	7.4	7.5	7.2	7.3			
20	7.6	7.2	7.4	7.6	7.3	7.4	7.6	7.3	7.4			
21	7.6	7.3	7.4	7.6	7.3	7.4	7.5	7.3	7.4			
22	7.6	7.2	7.4	7.5	7.3	7.4	---	---	---			
23	7.5	7.2	7.3	7.5	7.3	7.4	---	---	---			
24	7.3	7.1	7.2	7.6	7.3	7.4	---	---	---			
25	7.3	7.1	7.2	7.6	7.3	7.4	---	---	---			
26	7.3	7.1	7.2	7.6	7.3	7.4	---	---	---			
27	7.5	7.1	7.3	7.6	7.3	7.4	---	---	---			
28	7.4	7.0	7.2	7.5	7.3	7.4	---	---	---			
29	7.3	7.0	7.1	7.6	7.3	7.4	---	---	---			
30	7.3	7.0	7.1	7.6	7.3	7.5	---	---	---			
31	7.3	7.0	7.1	---	---	---	---	---	---			
MONTH	7.6	7.0	7.3	7.6	7.0	7.3	7.7	7.2	7.4			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	7.5	7.1	7.3	7.2	7.0	7.1	7.1	6.8	6.9
2	---	---	---	7.4	7.1	7.3	7.2	7.0	7.1	7.1	6.8	6.9
3	---	---	---	7.4	7.0	7.2	7.2	6.9	7.1	7.0	6.8	6.9
4	---	---	---	7.4	7.0	7.2	7.1	6.9	7.0	7.1	6.7	6.8
5	---	---	---	7.3	7.0	7.2	7.1	6.9	7.0	7.0	6.7	6.8
6	---	---	---	7.2	6.9	7.0	7.1	6.9	7.0	7.0	6.7	6.8
7	---	---	---	7.1	6.9	7.0	7.1	6.9	7.0	7.0	6.7	6.8
8	---	---	---	7.0	6.9	6.9	7.2	7.0	7.1	6.9	6.7	6.8
9	---	---	---	7.0	6.9	6.9	7.1	7.0	7.0	7.1	6.8	6.9
10	---	---	---	7.0	6.9	6.9	7.1	6.9	7.0	7.5	6.9	7.2
11	---	---	---	6.9	6.9	6.9	7.0	6.9	7.0	7.6	7.1	7.3
12	---	---	---	6.9	6.8	6.9	7.0	6.9	6.9	7.5	7.1	7.3
13	---	---	---	7.1	6.8	7.0	6.9	6.8	6.9	7.5	7.1	7.2
14	---	---	---	7.0	6.8	6.9	7.0	6.8	6.9	7.6	7.1	7.3
15	---	---	---	6.9	6.7	6.8	7.2	6.8	6.9	7.5	7.1	7.2
16	---	---	---	6.8	6.6	6.7	6.9	6.8	6.9	7.5	7.1	7.2
17	---	---	---	6.8	6.6	6.7	7.0	6.8	6.8	7.5	7.0	7.2
18	---	---	---	6.9	6.7	6.8	7.0	6.8	6.9	7.4	7.0	7.2
19	---	---	---	7.1	6.8	7.0	7.0	6.8	6.8	7.5	7.1	7.2
20	---	---	---	7.0	6.9	6.9	6.9	6.8	6.8	7.7	7.1	7.3
21	---	---	---	7.0	6.9	6.9	6.9	6.8	6.8	7.5	7.1	7.2
22	---	---	---	7.1	6.9	7.0	6.9	6.8	6.8	7.4	7.1	7.2
23	7.7	7.5	7.6	7.3	6.8	7.1	6.9	6.8	6.8	7.3	7.0	7.1
24	7.8	7.5	7.6	7.2	6.9	7.1	7.0	6.8	6.9	7.3	7.0	7.1
25	8.6	7.4	7.6	7.2	6.9	7.1	7.0	6.8	6.9	7.3	7.0	7.1
26	7.6	7.3	7.4	7.6	7.1	7.4	7.1	6.8	7.0	7.3	7.0	7.1
27	7.6	7.2	7.4	7.8	7.3	7.5	7.0	6.8	6.9	7.3	7.0	7.1
28	7.4	7.1	7.3	7.7	7.2	7.4	7.1	6.8	6.9	7.3	7.0	7.1
29	---	---	---	7.6	7.1	7.3	7.1	6.8	6.9	7.4	7.0	7.1
30	---	---	---	7.4	7.1	7.2	7.2	6.8	6.9	7.3	7.0	7.2
31	---	---	---	7.5	7.1	7.2	---	---	---	7.2	7.0	7.1
MONTH	8.6	7.1	7.5	7.8	6.6	7.1	7.2	6.8	6.9	7.7	6.7	7.1

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL--Continued

PH (UNITS), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.2	6.9	7.0	7.3	7.1	7.2	7.5	7.2	7.3	7.4	7.2	7.3
2	7.3	6.9	7.1	7.3	7.0	7.1	7.3	7.2	7.3	7.4	7.2	7.3
3	7.4	7.1	7.2	7.2	7.0	7.1	7.3	7.1	7.2	7.4	7.2	7.3
4	7.4	7.1	7.3	7.2	7.0	7.1	7.3	7.1	7.2	7.4	7.2	7.3
5	7.4	7.1	7.2	7.2	7.0	7.1	7.3	7.1	7.2	7.5	7.3	7.4
6	7.4	7.2	7.3	7.3	7.0	7.1	7.3	7.1	7.2	7.5	7.3	7.4
7	7.4	7.2	7.3	7.2	7.0	7.1	7.3	7.1	7.2	7.5	7.3	7.4
8	7.5	7.3	7.4	7.2	7.0	7.1	7.4	7.2	7.3	7.6	7.3	7.4
9	7.5	7.3	7.4	7.2	7.0	7.1	7.4	7.2	7.3	7.6	7.4	7.5
10	7.5	7.3	7.4	7.2	7.0	7.1	7.5	7.2	7.3	7.6	7.4	7.5
11	7.6	7.4	7.5	7.3	7.1	7.2	7.5	7.2	7.3	7.6	7.4	7.5
12	7.6	7.4	7.5	7.2	7.1	7.2	7.4	7.2	7.3	7.6	7.4	7.5
13	7.6	7.3	7.5	7.2	7.1	7.1	7.5	7.2	7.3	7.6	7.4	7.5
14	7.5	7.3	7.4	7.2	7.1	7.1	7.4	7.2	7.3	7.5	7.4	7.5
15	7.5	7.3	7.4	7.2	7.0	7.1	7.4	7.1	7.2	7.5	7.4	7.5
16	7.5	7.3	7.3	7.2	7.0	7.1	7.4	7.2	7.3	7.6	7.4	7.5
17	7.5	7.3	7.4	7.2	7.0	7.1	7.4	7.2	7.3	7.5	7.4	7.4
18	7.5	7.3	7.4	7.2	7.0	7.1	7.4	7.2	7.3	7.5	7.3	7.4
19	7.4	7.3	7.3	7.2	7.0	7.1	7.4	7.2	7.3	7.5	7.3	7.4
20	7.4	7.3	7.3	7.2	7.0	7.1	7.4	7.2	7.3	7.5	7.3	7.4
21	7.4	7.2	7.3	7.2	7.0	7.1	7.5	7.3	7.4	7.5	7.3	7.4
22	7.4	7.2	7.3	7.3	7.1	7.2	7.4	7.3	7.4	7.5	7.3	7.4
23	7.4	7.3	7.3	7.5	7.2	7.3	7.4	7.3	7.3	7.5	7.3	7.4
24	7.5	7.3	7.4	7.5	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.4
25	7.4	7.3	7.4	7.4	7.3	7.3	7.5	7.3	7.4	7.5	7.3	7.4
26	7.4	7.2	7.3	7.5	7.2	7.3	7.5	7.3	7.4	7.5	7.3	7.4
27	7.4	7.2	7.3	7.6	7.3	7.4	7.5	7.3	7.4	7.4	7.3	7.3
28	7.8	7.2	7.3	7.6	7.3	7.4	7.5	7.3	7.4	7.3	7.2	7.3
29	7.3	7.1	7.2	7.6	7.3	7.4	7.4	7.3	7.3	7.4	7.2	7.3
30	7.3	7.1	7.2	7.6	7.3	7.4	7.4	7.2	7.3	7.4	7.1	7.3
31	---	---	---	7.5	7.2	7.4	7.4	7.2	7.3	---	---	---
MONTH	7.8	6.9	7.3	7.6	7.0	7.2	7.5	7.1	7.3	7.6	7.1	7.4
YEAR	8.6	6.6	7.2									

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.0	18.5	19.0	10.5	9.5	10.0	5.0	4.0	4.5			
2	18.5	18.0	18.5	10.5	9.5	10.0	4.5	3.5	4.0			
3	18.5	18.0	18.0	10.5	9.5	10.0	4.0	2.5	3.5			
4	19.0	18.0	18.5	10.5	9.5	10.0	3.5	2.5	3.0			
5	18.0	18.0	18.0	10.0	9.5	10.0	3.5	2.0	3.0			
6	19.0	17.5	18.0	9.5	9.0	9.5	3.5	2.5	3.0			
7	19.0	18.0	18.5	9.5	8.0	9.0	4.0	3.0	3.5			
8	19.0	18.5	18.5	9.0	8.0	8.5	3.5	2.0	3.0			
9	19.0	18.5	18.5	8.5	7.5	8.0	3.0	1.5	2.5			
10	18.5	17.5	18.0	8.5	7.0	7.5	3.0	2.0	2.5			
11	17.5	16.5	17.0	8.0	7.5	7.5	3.0	2.0	2.5			
12	17.0	16.5	16.5	---	---	---	3.0	2.0	3.0			
13	17.0	16.0	16.5	---	---	---	3.5	1.5	2.5			
14	17.0	16.0	16.5	---	---	---	2.0	1.5	2.0			
15	16.5	15.5	16.0	---	---	---	2.5	1.5	2.0			
16	16.0	15.0	15.5	6.5	6.0	6.5	2.5	1.5	2.0			
17	15.5	14.5	15.0	6.5	6.0	6.0	2.5	1.5	2.0			
18	15.0	14.0	14.5	6.5	6.0	6.5	3.0	1.5	2.0			
19	14.5	13.5	14.0	7.0	6.0	6.5	3.0	2.0	2.5			
20	14.5	14.0	14.0	6.5	6.0	6.5	3.0	2.0	2.5			
21	14.0	13.5	14.0	6.5	6.0	6.0	3.0	2.0	2.5			
22	13.5	12.0	13.0	6.5	5.5	6.0	---	---	---			
23	13.0	11.5	12.5	6.0	5.0	5.5	---	---	---			
24	12.5	12.0	12.0	5.5	4.5	5.0	---	---	---			
25	12.5	12.0	12.5	5.5	5.0	5.0	---	---	---			
26	12.5	11.5	12.0	5.5	5.0	5.0	---	---	---			
27	11.5	10.5	11.0	6.0	5.0	5.5	---	---	---			
28	11.0	10.0	10.5	6.0	5.5	5.5	---	---	---			
29	10.5	10.0	10.5	6.0	5.0	5.5	---	---	---			
30	10.5	10.0	10.5	5.5	4.5	5.0	---	---	---			
31	11.0	10.0	10.5	---	---	---	---	---	---			
MONTH	19.0	10.0	15.0	10.5	4.5	7.0	5.0	1.5	3.0			

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL--Continued

TEMPERATURE (C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	5.0	3.5	4.0	10.5	9.0	9.5	16.5	15.5	16.0
2	---	---	---	5.0	3.5	4.0	9.5	9.0	9.5	17.5	16.0	16.5
3	---	---	---	5.0	4.0	4.5	11.0	9.5	10.0	18.0	16.5	17.0
4	---	---	---	5.0	4.0	4.5	10.0	9.5	9.5	17.5	16.5	17.0
5	---	---	---	6.0	4.5	5.0	10.0	9.0	9.5	17.5	16.5	17.0
6	---	---	---	6.0	5.5	5.5	10.0	9.0	9.5	18.5	17.0	17.5
7	---	---	---	6.5	5.5	6.0	10.0	9.0	9.5	18.5	17.5	18.0
8	---	---	---	6.5	5.5	6.0	10.0	9.5	10.0	18.5	17.0	17.5
9	---	---	---	7.0	5.5	6.5	10.0	9.0	9.5	17.5	15.0	16.5
10	---	---	---	7.5	6.0	7.0	10.5	9.0	9.5	16.0	15.0	15.5
11	---	---	---	8.0	6.5	7.0	10.5	9.5	10.0	16.0	14.5	15.5
12	---	---	---	8.0	7.0	7.5	12.0	9.5	10.5	16.5	15.0	15.5
13	---	---	---	8.5	7.5	8.0	13.0	10.5	11.5	17.5	15.5	16.5
14	---	---	---	9.0	8.0	8.5	13.0	11.5	12.0	17.5	16.0	16.5
15	---	---	---	9.5	8.0	9.0	13.0	11.5	12.5	18.0	16.0	17.0
16	---	---	---	10.0	8.5	9.0	13.5	12.0	12.5	18.0	16.5	17.0
17	---	---	---	9.5	8.5	9.0	14.0	12.5	13.0	19.0	17.0	18.0
18	---	---	---	9.5	9.0	9.0	14.5	12.5	13.5	20.0	18.0	18.5
19	---	---	---	9.5	8.5	9.0	14.5	13.0	14.0	19.5	18.5	19.0
20	---	---	---	9.0	8.5	8.5	14.5	13.5	14.0	20.5	18.5	19.5
21	---	---	---	9.5	8.5	8.5	15.0	14.0	14.5	20.5	19.0	20.0
22	---	---	---	8.5	8.5	8.5	16.0	14.5	15.0	21.0	20.0	20.5
23	1.5	1.0	1.5	9.0	7.5	8.0	17.0	15.0	16.0	22.0	20.5	21.0
24	2.0	1.0	1.5	8.0	6.5	7.5	16.5	15.5	16.0	22.0	21.0	21.5
25	3.5	1.5	2.5	7.0	6.5	6.5	16.5	15.5	16.0	22.5	21.5	21.5
26	3.5	2.5	3.0	7.0	6.0	6.5	16.5	15.5	16.0	23.0	21.5	22.0
27	4.5	3.0	3.5	8.0	6.5	7.0	16.0	15.5	16.0	23.5	21.5	22.5
28	4.5	3.5	4.0	7.5	6.5	7.0	16.5	15.0	15.5	24.0	22.0	23.0
29	---	---	---	9.5	7.0	8.0	16.5	15.0	15.5	23.5	22.0	23.0
30	---	---	---	10.0	8.0	9.0	17.0	15.0	15.5	22.5	22.0	22.0
31	---	---	---	10.0	9.0	9.5	---	---	---	22.0	21.5	22.0
MONTH	4.5	1.0	2.5	10.0	3.5	7.0	17.0	9.0	12.5	24.0	14.5	18.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	21.5	21.5	25.5	24.5	25.0	---	---	---	28.0	27.0	27.5
2	23.0	21.5	22.0	26.0	25.0	25.5	---	---	---	28.0	27.0	27.5
3	22.5	21.5	22.0	26.5	24.5	25.5	---	---	---	28.5	27.5	28.0
4	22.5	21.5	22.0	26.0	25.0	25.5	28.0	27.0	27.5	28.0	27.0	27.5
5	22.0	21.5	22.0	26.5	25.5	26.0	28.5	27.5	28.0	28.0	27.5	27.5
6	22.0	21.0	21.5	26.5	26.0	26.0	29.0	27.5	28.0	28.0	27.5	27.5
7	21.0	20.5	21.0	26.5	25.5	26.0	29.0	28.0	28.5	28.0	26.5	27.5
8	20.5	20.0	20.5	27.5	26.0	26.5	29.5	28.5	28.5	27.0	26.5	27.0
9	20.5	19.5	20.0	27.5	26.5	27.0	29.5	28.5	29.0	26.5	26.0	26.0
10	19.5	19.0	19.5	27.5	26.0	27.0	29.5	28.5	29.0	26.5	25.5	26.0
11	20.0	19.0	19.0	26.5	26.0	26.0	29.5	28.5	29.0	26.0	25.0	25.5
12	20.5	19.0	19.5	27.0	26.0	26.5	29.0	28.5	29.0	26.0	24.5	25.0
13	22.0	19.5	20.5	28.0	26.0	27.0	29.0	28.5	28.5	25.0	24.0	24.5
14	21.5	20.0	20.5	28.0	26.5	27.5	28.5	28.5	28.5	24.5	24.0	24.5
15	21.5	20.5	21.0	29.0	27.0	27.5	29.0	28.0	28.5	24.0	23.0	23.5
16	22.5	20.5	21.5	29.0	27.0	28.0	28.5	28.0	28.5	23.5	23.0	23.5
17	22.5	21.0	21.5	29.0	26.5	28.0	28.5	28.0	28.5	24.0	23.5	23.5
18	23.0	21.5	22.5	29.0	25.5	27.0	28.0	27.5	27.5	24.5	23.5	24.0
19	23.5	22.0	23.0	29.0	26.5	28.0	27.5	26.5	27.5	25.0	23.5	24.0
20	23.5	22.5	23.0	29.0	28.0	27.5	27.5	27.0	27.0	25.0	24.0	24.5
21	23.5	22.5	23.5	31.5	28.0	29.5	27.0	26.0	26.5	24.5	23.5	24.0
22	23.5	22.5	23.0	30.5	29.5	30.0	27.0	26.0	26.5	24.0	23.0	23.5
23	24.0	22.5	23.0	---	---	---	27.0	26.0	26.5	23.5	23.0	23.5
24	24.0	22.5	23.0	---	---	---	27.0	26.0	26.5	23.5	23.0	23.5
25	23.5	23.0	23.5	---	---	---	26.5	25.5	26.0	23.0	22.5	23.0
26	25.0	23.0	24.0	---	---	---	26.5	25.5	26.0	23.0	22.5	22.5
27	25.5	23.5	24.0	---	---	---	26.5	25.5	26.0	23.0	22.5	23.0
28	25.0	24.0	24.5	---	---	---	27.0	25.5	26.0	23.0	22.5	22.5
29	25.5	24.0	25.0	---	---	---	27.5	26.0	26.5	22.5	22.0	22.5
30	25.5	24.5	25.0	---	---	---	28.0	26.5	27.0	22.5	22.0	22.0
31	---	---	---	---	---	---	27.5	26.5	27.0	---	---	---
MONTH	25.5	19.0	22.0	31.5	24.5	27.0	29.5	25.5	27.5	28.5	22.0	25.0
YEAR	31.5	1.0	16.5									

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.6	6.6	7.2	9.0	7.9	8.4	11.2	10.5	10.8			
2	7.3	6.5	6.8	10.6	8.2	9.3	11.7	10.6	11.1			
3	6.7	6.2	6.5	10.6	9.7	10.1	14.6	11.3	12.0			
4	6.4	6.0	6.2	10.5	9.9	10.1	11.7	11.3	11.5			
5	6.2	5.7	5.9	10.4	9.8	10.1	14.1	11.3	11.6			
6	6.0	5.3	5.6	10.4	9.8	10.2	11.8	11.3	11.5			
7	5.7	5.1	5.4	14.9	10.0	10.7	12.2	11.7	11.9			
8	5.7	4.9	5.3	14.5	10.3	11.0	12.4	10.0	12.1			
9	5.5	4.8	5.2	11.4	10.7	11.0	12.6	11.9	12.2			
10	5.6	5.1	5.3	11.2	10.8	11.1	12.8	12.1	12.5			
11	5.7	5.1	5.4	11.2	11.0	---	15.0	12.3	13.1			
12	5.9	5.2	5.6	---	---	---	13.6	12.7	13.1			
13	6.2	5.4	5.8	---	---	---	16.2	13.1	14.1			
14	6.9	5.6	6.1	---	---	---	15.6	13.0	13.7			
15	6.9	5.9	6.5	---	---	---	16.8	13.4	13.9			
16	9.5	6.3	7.1	10.4	9.9	10.2	17.1	13.4	13.8			
17	8.5	7.3	8.1	10.4	9.7	10.1	14.2	13.4	13.8			
18	8.6	7.8	8.3	10.4	9.7	10.1	14.2	13.4	13.7			
19	8.6	8.0	8.3	10.5	9.8	10.1	17.1	13.0	13.7			
20	8.5	7.7	8.1	10.5	9.8	10.1	14.1	13.0	13.5			
21	8.6	7.8	8.2	10.4	9.8	10.1	16.8	13.0	13.7			
22	11.5	7.7	8.7	13.2	9.9	10.7	---	---	---			
23	11.8	7.9	8.7	13.7	10.1	11.1	---	---	---			
24	9.3	7.7	8.1	13.8	10.4	11.0	---	---	---			
25	8.2	7.2	7.7	10.9	10.4	10.7	---	---	---			
26	8.5	7.3	8.0	10.9	10.4	10.7	---	---	---			
27	8.9	7.8	8.4	11.0	10.4	10.6	---	---	---			
28	8.7	7.8	8.4	10.8	10.3	10.6	---	---	---			
29	8.6	7.8	8.1	10.8	10.2	10.5	---	---	---			
30	8.7	7.7	8.1	11.0	10.3	10.7	---	---	---			
31	8.8	7.9	8.3	---	---	---	---	---	---			
MONTH	11.8	4.8	7.1	14.9	7.9	10.4	17.1	10.0	12.7			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	10.9	9.3	10.2	10.3	9.7	10.0	6.9	6.0	6.4
2	---	---	---	13.3	9.3	10.1	10.0	9.6	9.9	6.8	6.0	6.5
3	---	---	---	11.2	8.6	9.6	9.9	9.4	9.7	8.4	5.9	6.4
4	---	---	---	10.4	8.3	9.5	9.6	9.1	9.4	6.5	5.7	6.1
5	---	---	---	10.1	7.8	9.1	9.5	8.9	9.2	6.5	5.3	5.8
6	---	---	---	9.3	6.9	7.9	11.8	9.0	9.4	6.2	5.1	5.6
7	---	---	---	8.2	6.9	7.3	12.2	9.1	9.6	6.0	4.9	5.4
8	---	---	---	8.0	7.2	7.6	12.6	9.2	9.9	5.8	4.9	5.4
9	---	---	---	8.4	7.6	7.8	11.7	9.6	10.0	9.0	5.3	6.4
10	---	---	---	8.7	7.7	8.0	10.8	9.6	9.8	8.6	6.5	7.7
11	---	---	---	8.6	7.8	8.1	9.8	9.6	9.6	8.7	7.9	8.3
12	---	---	---	8.6	7.9	8.2	9.6	9.4	9.5	8.5	7.6	8.1
13	---	---	---	8.8	8.2	8.6	9.4	9.1	9.3	8.4	7.5	7.9
14	---	---	---	9.2	8.5	8.8	9.2	9.0	9.1	8.6	7.7	8.1
15	---	---	---	9.1	8.7	8.9	9.1	8.8	9.0	8.6	7.6	8.0
16	---	---	---	9.1	8.4	8.8	8.9	8.6	8.7	8.6	7.5	7.9
17	---	---	---	9.1	8.5	8.8	8.7	8.4	8.5	8.8	7.4	7.9
18	---	---	---	9.3	8.8	9.0	8.7	8.2	8.4	8.3	7.4	7.9
19	---	---	---	12.5	9.2	9.9	8.4	8.0	8.1	8.5	7.5	8.0
20	---	---	---	9.7	9.5	9.6	8.3	7.9	8.1	8.9	7.5	8.2
21	---	---	---	10.1	9.5	9.6	8.1	7.8	7.9	8.5	7.6	8.0
22	---	---	---	10.1	9.6	9.9	8.0	7.6	7.8	8.4	7.5	7.9
23	12.1	11.6	11.9	13.1	9.9	10.8	8.0	7.5	7.8	8.2	7.2	7.8
24	12.3	11.6	11.9	12.7	10.2	10.8	8.0	7.6	7.8	8.0	7.2	7.5
25	12.3	11.2	11.8	12.9	10.4	10.9	8.0	7.6	7.7	7.6	6.7	7.1
26	11.7	10.3	11.2	11.1	10.7	10.9	8.3	6.7	7.5	7.3	6.3	6.9
27	11.5	10.0	10.8	11.2	10.7	10.9	7.0	6.4	6.7	7.0	6.4	6.8
28	10.9	9.6	10.4	11.1	10.4	10.7	7.0	6.2	6.6	7.0	6.2	6.6
29	---	---	---	10.8	10.3	10.5	7.1	6.3	6.7	7.1	6.0	6.7
30	---	---	---	10.5	10.0	10.3	7.0	6.3	6.6	7.3	6.4	6.8
31	---	---	---	11.5	9.9	10.2	---	---	---	6.9	6.2	6.5
MONTH	12.3	9.6	11.3	13.3	6.9	9.4	12.6	6.2	8.6	9.0	4.9	7.1

01482800 DELAWARE RIVER AT REEDY ISLAND JETTY, DEL--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.9	6.2	6.6	6.3	5.7	6.0	7.1	6.3	6.6	6.2	5.4	5.7
2	6.9	6.1	6.5	6.2	5.5	5.8	6.9	5.9	6.3	5.9	5.3	5.6
3	9.3	6.3	6.8	6.2	5.4	5.7	6.6	5.7	6.1	5.7	5.2	5.5
4	8.2	6.4	6.8	6.0	5.4	5.6	6.2	5.0	5.7	6.1	5.4	5.7
5	7.0	6.4	6.7	5.8	5.0	5.4	5.5	4.9	5.2	6.3	5.6	5.8
6	7.0	6.3	6.7	5.8	4.9	5.3	5.4	4.9	5.1	5.9	5.5	5.7
7	7.3	6.6	7.0	5.5	5.0	5.2	5.6	4.8	5.1	6.0	5.4	5.7
8	7.6	7.0	7.3	5.3	4.5	4.9	6.6	5.0	5.6	6.3	5.6	5.9
9	7.7	7.3	7.6	4.6	4.2	4.4	6.6	5.7	6.1	6.4	5.9	6.1
10	8.1	7.4	7.7	4.8	4.4	4.6	6.5	5.6	6.0	6.5	6.1	6.3
11	8.2	7.7	8.0	5.2	4.8	5.0	6.5	5.6	6.0	6.8	6.0	6.4
12	8.4	7.8	8.0	5.5	5.1	5.3	6.3	5.5	5.8	6.9	6.4	6.6
13	8.8	7.7	8.0	5.5	5.0	5.2	6.2	5.4	5.7	7.0	6.5	6.7
14	8.5	7.7	7.9	5.3	4.8	5.1	5.9	5.4	5.6	7.0	6.6	6.8
15	7.9	7.5	7.7	5.2	4.6	4.9	6.2	5.1	5.6	7.1	6.7	6.9
16	8.3	7.2	7.5	4.8	4.3	4.5	6.6	5.4	5.9	7.1	6.7	6.9
17	8.1	7.2	7.6	---	---	---	6.2	5.7	6.0	7.0	6.6	6.8
18	8.1	7.2	7.5	---	---	---	6.3	5.6	5.9	6.8	6.4	6.6
19	7.7	7.1	7.4	---	---	---	6.5	5.6	5.9	6.7	6.3	6.5
20	7.7	7.0	7.1	5.6	5.0	5.2	6.3	5.6	5.8	6.5	6.2	6.3
21	7.4	6.8	7.0	5.7	5.0	5.2	6.8	5.8	6.2	6.5	6.2	6.4
22	7.3	6.8	7.0	6.2	5.1	5.6	6.8	6.2	6.5	6.6	6.2	6.4
23	7.5	6.8	7.1	6.6	5.6	6.1	6.5	5.8	6.2	6.6	6.1	6.3
24	7.4	6.9	7.1	6.5	5.9	6.2	6.2	5.8	5.9	6.5	6.2	6.3
25	7.2	6.8	7.0	6.3	6.0	6.1	6.5	5.8	6.1	6.9	6.4	6.6
26	7.1	6.6	6.8	7.5	5.7	6.1	6.5	5.9	6.1	6.8	6.5	6.7
27	7.0	6.4	6.7	7.8	5.9	6.7	6.8	6.0	6.2	6.6	6.4	6.5
28	6.8	5.8	6.5	8.1	6.7	7.3	6.4	5.9	6.1	6.6	6.2	6.4
29	6.5	6.1	6.3	8.0	6.9	7.4	6.4	5.8	6.0	6.8	6.1	6.4
30	6.5	5.9	6.2	7.5	6.8	7.1	6.2	5.6	5.9	6.8	5.9	6.4
31	---	---	---	7.3	6.3	6.8	6.0	5.4	5.7	---	---	---
MONTH	9.3	5.8	7.1	8.1	4.2	5.7	7.1	4.8	5.9	7.1	5.2	6.3
YEAR	17.1	4.2	7.9									

01482925 ALLOWAY CREEK AT INLET OF ALLOWAY LAKE NEAR ALLOWAY, NJ

LOCATION.--Lat 39°34'39", long 75°20'47", Salem County, Hydrologic Unit 02040206, at bridge on Alloway Woodstown Road, 1.7 mi (2.7 km) upstream from outflow of Alloway Lake, 2.5 mi (4.0 km) southeast of Portertown, and 1.4 mi (2.3 km) northwest of outflow of Sycamore Lake.

DRAINAGE AREA.--19.4 mi² (50.2 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM .7UM-MF (COL./100 ML)	FECAL COLIFORM (EC BROTH) (MPN)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML)	FECAL STREPTOCOCCI (MPN)	HARDNESS (CA,MG) (MG/L)
NOV 16...	0945	184	6.8	2.0	2	9.2	1.0	84000	130	3300	170	58
JAN 27...	0855	186	6.3	.0	2	11.5	--	240	79	500	70	57
APR 07...	0935	148	6.7	6.0	4	8.8	.6	160	--	170	--	48
MAY 11...	1000	175	7.1	16.0	3	8.2	1.6	870	2400	120	<200	60
JUN 14...	0930	186	7.3	18.0	3	5.9	.9	560	490	1000	79	61
JUL 07...	0920	201	7.2	24.0	1	10.6	1.4	--	5400	--	540	67
AUG 09...	0930	186	7.1	25.0	2	4.6	2.9	--	16000	--	110	62

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFIDE (S) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 16...	46	10	8.0	5.2	4.0	15	0	12	3.8	--	26	17
JAN 27...	48	10	7.8	5.3	3.8	11	0	9	8.0	--	25	16
APR 07...	42	9.4	6.0	4.2	3.7	7	0	6	2.2	--	27	11
MAY 11...	46	11	8.0	5.0	4.5	17	0	14	2.2	.0	22	17
JUN 14...	45	11	8.2	5.6	4.5	20	0	16	1.6	--	25	18
JUL 07...	43	12	8.9	5.5	4.4	29	0	24	2.9	--	20	19
AUG 09...	38	11	8.5	5.7	5.6	29	0	24	3.7	--	21	19

DATE	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 16...	--	114	2	--	--	--	--	1.4	--	.05	--	4.8
JAN 27...	--	94	22	--	--	--	--	1.4	--	.03	--	1.8
APR 07...	--	93	8	--	--	--	--	1.1	--	.05	--	3.6
MAY 11...	5.3	139	3	--	--	--	--	1.4	--	.08	--	4.0
JUN 14...	--	126	0	--	--	--	--	.80	--	.08	--	5.7
JUL 07...	--	152	1	2.1	.02	.09	.55	.64	2.7	.05	.03	7.1
AUG 09...	--	134	7	2.1	.03	.11	.76	.87	3.0	.08	.02	6.2

01482925 ALLOWAY CREEK AT INLET OF ALLOWAY LAKE NEAR ALLOWAY, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)
MAY								
11...	1000	10	1	0	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	PHENOLS (UG/L)
MAY								
11...	130	20	60	.0	5	0	20	0

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 **PEPACTON RESERVOIR.**--Lat 42°04'38", long 74°58'04", Delaware County, NY, Hydrologic Unit 02040102, near release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, NY. DRAINAGE AREA, 371 mi^2 (961 km^2). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 15, 1954. Usable capacity 140,190 mil gal (530.6 hm^3) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway, elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm^3); at minimum operating level, 9,609 mil gal (36.37 hm^3); at still of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098 mil gal (23.08 hm^3); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal (7.184 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through East Delaware Tunnel to Rondout Reservoir on Rondout Creeek, in Hudson River basin (see Delaware River Basin, diversions), for water supply to City of New York; for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply and Department of Water Resources, City of New York.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 153,145 mil gal (579.7 hm^3) Mar. 31, elevation, 1,281.80 ft (390.693 m); minimum observed, 103,076 mil gal (390.1 hm^3) Sept. 16, elevation, 1,251.98 ft (381.604 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm^3) Apr. 5, 1960, elevation, 1,282.27 ft (390.836 m); minimum observed (after first filling), 9,575 mil gal (36.24 hm^3) Dec. 26, 1964, elevation, 1,151.92 ft (351.105 m).

01424997 **CANNONSVILLE RESERVOIR.**--Lat 42°03'46", long 75°22'29", Delaware County, NY, Hydrologic Unit 02040101, in emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of Stilesville, NY. DRAINAGE AREA, 454 mi^2 (1,176 km^2). PERIOD OF RECORD, October 1963 to current year. REVISED RECORDS, WRD-NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began Sept. 30, 1963, usable capacity 95,706 mil gal (362.2 hm^3) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation, 1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm^3); at minimum operating level, 2,912 mil gal (11.02 hm^3); at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m), 1,892 mil gal (7.161 hm^3); in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal (1.241 hm^3). Figures given herein represent total contents. Impounded water is diverted for New York City water supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see Delaware River Basin, diversions); is released in Delaware River for downstream low flow augmentation as directed by Delaware River Master; and is released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records furnished by Board of Water Supply, City of New York.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 108,116 mil gal (409.2 hm^3) Mar. 15, elevation, 1,155.85 ft (352.303 m); minimum observed, 52,813 mil gal (199.9 hm^3) Sept. 17, elevation, 1,115..4 ft (340.78 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 108,116 mil gal (409.2 hm^3) Mar. 15, 1977, elevation, 1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm^3) Nov. 7, 1968, elevation, 1,066.24 ft (324.990 m).

01428900 **PROMPTON RESERVOIR.**--Lat 41°35'18", long 75°19'39", Wayne County, PA, Hydrologic Unit 02040103, at dam on West Branch Lackawaxen River, 0.3 mi (0.5 km) north of Prompton, 0.4 mi (0.6 km) upstream from highway bridge and 0.5 mi (0.8 km) upstream from Van Auken Creek. DRAINAGE AREA, 59.6 mi^2 (154 km^2). PERIOD OF RECORD, December 1960 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungaged bedrock spillway at elevation 1,205.00 ft (367.284 m); storage began July 1960. Capacity at elevation 1,205.00 ft (367.284 m) is 51,700 acre-ft (63.7 hm^3). Ordinary minimum (conservation) pool elevation, 1,125.00 ft (342.900 m) capacity, 3,420 acre-ft (4.22 hm^3). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 5,980 acre-ft (7.37 hm^3) Mar. 14, elevation, 1,133.00 ft (419.630 m); minimum, 3,420 acre-ft (4.22 hm^3) Feb. 5-13, elevation, 1,125.00 ft (416.667 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,170 acre-ft (10.1 hm^3) June 29, 1973, elevation, 1,138.40 ft (346.984 m); minimum (after first filling), 2,920 acre-ft (3.60 hm^3) Sept. 27, 1964, elevation, 1,123.20 ft (342.351 m).

01429400 **GENERAL EDGAR JADWIN RESERVOIR.**--Lat 41°36'44", long 75°15'55", Wayne County, PA, Hydrologic Unit 02040103, at dam on Dyberry Creek, 0.45 mi (0.72 km) upstream from unnamed tributary, 2.4 mi (3.9 km) north of Honesdale, and 2.9 mi (4.7 km) upstream from mouth. DRAINAGE AREA, 64.5 mi^2 (167.1 km^2). PERIOD OF RECORD, October 1959 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, concrete spillway at elevation, 1,053.00 ft (320.954 m); storage began in October 1959. Capacity at elevation 1,053.00 ft (320.954 m) is 24,500 acre-ft (30.2 hm^3). Reservoir is used for flood control. Figures given herein represent total contents. Regulation is accomplished by discharge through an ungated tunnel. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 5,500 acre-ft (6.78 hm^3) Mar. 14, elevation, 1,014.00 ft (375.556 m); no storage many times.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 6,520 acre-ft (8.04 hm^3) June 19, 1973, elevation 1,017.40 ft (310,104 m); no storage many times.

01431700 **LAKE WALLENPAUPACK.**--Lat 41°27'35", long 75°11'10", Wayne County, PA, Hydrologic Unit 02040103, at dam on Wallenpaupack Creek at Wilsonville, 1.2 mi (1.9 km) south of Hawley and 1.5 mi (2.4 km) upstream from mouth. DRAINAGE AREA, 228 mi^2 (591 km^2). PERIOD OF RECORD, January 1926 to current year. GAGE, vertical staff. Datum of gage is NGVD (levels by Pennsylvania Power and Light Co.).

Reservoir formed by concrete gravity-type and earthfill dam with concrete spillway at elevation 1,176.00 ft (358.445 m) in two sections. Spillway equipped with roller gate, 14 ft high (4.267 m) on each section. Storage began Nov. 3, 1925; water in reservoir first reached minimum pool elevation in January 1926. Total capacity at elevation 1,190.00 ft (362.712 m), top of gates, is 209,300 acre-ft (258 hm^3) of which 157,800 acre-ft (195 hm^3) is controlled storage above elevation 1,160.00 ft (353.568 m), minimum pool. Reservoir is used for generation of hydroelectric power. Figures given herein represent usable contents. Records furnished by Pennsylvania Power and Light Co.

EXTREMES FOR CURRENT YEAR: Maximum contents, 141,070 acre-ft (174 hm^3) June 30, elevation, 1,187.10 ft (361.584 m); minimum 91,340 acre-ft (113 hm^3) Mar. 26, elevation, 1,178.10 ft (359.085 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 178,200 acre-ft (220 hm^3) Aug. 19-21, 1955, elevation, 1,193.45 ft (363.764 m); minimum (after first filling), 12,280 acre-ft (15.1 hm^3) Mar. 28, 1958, elevation, 1,162.60 ft (354.360 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, NY. DRAINAGE AREA, 118 mi^2 (306 km^2) excluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year. REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,010 ft (308 m).

Reservoir is formed by an earthfill dam; storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft^3 (40.7 hm^3) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft^3 (6.02 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0 ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR CURRENT YEAR: Maximum contents, 1,461.6 mil ft^3 (41.4 hm^3) Mar. 14, elevation, 1,071.8 ft (326.68 m); minimum, 834.9 mil ft^3 (23.6 hm^3) Jan. 26, elevation, 1,054.7 ft (321.47 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft^3 (41.4 hm^3) Mar. 14, 1977, elevation, 1,071.8 ft (326.68 m); minimum (after first filling), 141.4 mil ft^3 (4.00 hm^3) Dec. 2, 1938, elevation, 987.5 ft (300.99 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, NY. DRAINAGE AREA, 23.2 mi^2 (60.1 km^2). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959(M). Nonrecording gage. Datum of gage is NGVD (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,165.0 ft (355.09 m).

Reservoir is formed by an earthfill dam completed July 24, 1926; storage began Jan. 13, 1926. Usable capacity, 1,098.2 mil ft^3 (31.1 hm^3) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and 1,220.0 ft (371.86 m), top of permanent flashboards. Capacity below elevation 1,165.0 ft (355.09 m), minimum operating pool, about 26.8 mil ft^3 (0.759 hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 971.4 mil ft^3 (27.5 hm^3) June 29, July 5, elevation, 1,216.3 ft (370.73 m); minimum observed, 208.1 mil ft^3 (5.89 hm^3) Dec. 27, elevation, 1,184.8 ft (361.13 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft^3 (33.2 hm^3) July 20, 1945, elevation, 1,222.0 ft (372.47 m); minimum observed (after first filling), 26.8 mil ft^3 (0.759 hm^3) Nov. 15, 1928, elevation, 1,144.5 ft (348.84 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County, NY, Hydrologic Unit 02040104, at dam on Black Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, NY. DRAINAGE AREA, 6.46 mi^2 (16.7 km^2) excluding area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552: 1951-54. WRD-NY 1975: 1974(m). Nonrecording gage. Datum of gage is NGVD (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level, 1,043.3 ft (318.0 m).

Reservoir is formed by a concrete gravity-type dam; storage began Jan. 6, 1939. Usable capacity, 136.06 mil ft^3 (3.85 hm^3) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54 mil ft^3 (0.185 hm^3). Reservoir is used for storage of water for power. Water is received from Toronto and Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 127.8 mil ft^3 (3.62 hm^3) Mar. 16, elevation, 1,071.0 ft (326.44 m); minimum observed, 30.3 mil ft^3 (0.858 hm^3) Jan. 26, elevation, 1,054.6 ft (321.44 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft^3 (4.12 hm^3) July 30, 31, 1945, elevation, 1,073.1 ft (327.08 m); minimum observed (after first filling), about 6.54 mil ft^3 (0.185 hm^3) Mar. 16, 1963, elevation, 1,038.0 ft (316.38 m).

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, NY, Hydrologic Unit 02040104, at a gate-house at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, NY. DRAINAGE AREA, 91.8 mi^2 (238 km^2). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is NGVD (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 hm^3) between minimum operating level, elevation, 1,319.0 ft (402 m) and crest of spillway, elevation, 1,440.0 ft (438.9 m). Capacity at crest of spillway, 37,146 mil gal (140.6 hm^3); at minimum operating level, 2,205 mil gal (8.35 hm^3); dead storage below diversion sill and outlet sill at elevation 1,314.0 ft (400.5 m), 1,680 mil gal (6.36 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see Delaware River Basin, diversions); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Board of Water Supply, and Department of Water Resources, City of New York.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,424 mil gal (141.6 hm^3) Apr. 7, elevation, 1,440.56 ft (439.083 m); minimum observed, 15,114 mil gal (57.21 hm^3) Sept. 20, elevation, 1,383.78 ft (421.776 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm^3) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m); minimum observed (after first filling), 1,985 mil gal (7.513 hm^3) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, PA, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft (670 m) downstream from Bear Creek and 5 mi (8 km) northwest of White Haven. DRAINAGE AREA, 289 mi^2 (749 km^2). PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Corps of Engineers).

Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft (441.96 m); storage began Feb. 17, 1961; water in reservoir first reached conservation pool elevation in June 1961. Total capacity at elevation 1,450.0 ft (441.96 m) is 110,700 acre-ft (136 hm^3) of which 108,700 acre-ft (134 hm^3) is controlled storage above elevation 1,300.0 ft or 396.24 m (conservation pool). Dead storage is 2,000 acre-ft (2.47 hm^3). Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow regulated by three gates and low flow by-pass system. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents, 16,723 acre-ft (20.6 hm^3) Oct. 11, elevation, 1,361.13 ft (420.102 m); minimum, 1,645 acre-ft (2.03 hm^3) Nov. 15, elevation, 1,296.56 ft (400.172 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 42,600 acre-ft (52.5 hm^3) June 26, 1972, elevation, 1,398.20 (426.171 m); minimum (after establishment of conservation pool), 1,510 acre-ft (1.86 hm^3) Apr. 23, 1962, elevation, 1,295.10 ft (394.746 m).

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, PA, Hydrologic Unit 02040106, at dam on Wild Creek near Hatchery, PA, 0.7 mi (1.1 km) upstream from Hatchery, 2.6 mi (4.2 km) upstream from Wild Creek Dam, 4.4 mi (7.1 km) upstream from mouth, and 10 mi (16 km) northeast of Palmerton. DRAINAGE AREA, 16.5 mi^2 (42.7 km^2). PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by city of Bethlehem).

Reservoir formed by an earthfill dam, with ungated concrete spillway at elevation 1,000.00 ft (304.800 m); storage began in October 1958. Capacity at elevation 1,000.00 ft (304.800 m) is 19,980 acre-ft (24.6 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is done by valves on pipe through dam. Records furnished by city of Bethlehem. Figures given herein include diversion, since October 1969, from Tunkhannock Creek basin into Wild Creek basin.

EXTREMES FOR CURRENT YEAR: Maximum contents, 20,510 acre-ft (25.3 hm^3) Mar. 23, elevation, 1,000.91 ft (305.077 m); minimum, 14,840 acre-ft (18.3 hm^3) Sept. 24, elevation, 987.92 ft (304.910 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 20,510 acre-ft (25.3 hm^3) Jan. 28, 1976, elevation, 1000.84 ft (305.056 m); minimum 176 acre-ft (0.217 hm^3) Oct. 6, 1965, elevation, 902.40 ft (275.052 m).

01449700 WILD CREEK RESERVOIR.--Lat 40°53'50", long 75°33'50", Carbon County, PA, Hydrologic Unit 02040106, at dam on Wild Creek near Hatchery, PA, 1.6 mi (2.6 km) upstream from mouth, 2.4 mi (3.9 km) south of Hatchery, and 7.5 mi (12 km) northeast of Palmerton. DRAINAGE AREA, 22.2 mi^2 (57.5 km^2). PERIOD OF RECORD, January 1941 to current year. Nonrecording gage. Datum of gage is NGVD (levels by city of Bethlehem).

Reservoir formed by earthfill dam, with concrete ungated spillway at elevation 820.00 ft (249.936 m); storage began January 27, 1941; water in reservoir first reached minimum pool elevation in February 1941. Total capacity at elevation 820.00 ft (249.936 m) is 12,500 acre-ft (15.4 hm^3) of which 12,000 acre-ft (15 hm^3) is controlled storage. Reservoir is used for municipal water supply. Figures given herein represent usable contents. Regulation is accomplished by valves on pipe through dam. Records furnished by city of Bethlehem. Since October 1969 the basin upstream has received diversion from Tunkhannock Creek basin.

EXTREMES FOR CURRENT YEAR: Maximum contents, 12,348 acre-ft (15.2 hm^3) Mar. 23, elevation, 821.16 ft (253.44 m); minimum, 10,260 acre-ft (23.9 hm^3) Feb. 18, elevation, 813.40 ft (251.05 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 12,880 acre-ft (d5.9 hm^3) May 23, 1942, elevation, 822.93 ft (250.829 m); minimum (after first filling), 2,680 acre-ft (3.30 hm^3) Nov. 15, 1966, elevation, 774.10 ft (235.946 m).

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, PA, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.45 mi (0.72 km) upstream from gaging station on Pohopoco Creek, 0.55 mi (0.88 km) upstream from Sawmill Run and 2.3 mi (3.7 km) northeast of Parryville. DRAINAGE AREA, 96.3 mi^2 (249.4 km^2). PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Corps of Engineers).

Reservoir formed by an earth and rockfill dam with ungated, partially lined spillway at elevation 651.00 ft (198.425 m); storage began Feb. 8, 1971. Capacity at elevation 651.00 ft (198.425 m) is 68,300 acre-ft (84.2 hm^3). Ordinary minimum (conservation) pool elevation, 628.00 ft (191.414 m), capacity, 41,250 acre-ft (50.9 hm^3). Dead storage is 1,390 acre-ft (1.71 hm^3). Reservoir is used for recreation, flood control, low flow augmentation and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system and two flood-control gates. Records furnished by Corps of Engineers.

EXTREMES FOR CURRENT YEAR: Maximum contents 47,278 acre-ft (58.3 hm^3) Mar. 25, elevation, 634.04 ft (195.690 m); minimum, 35,985 acre-ft (44.4 hm^3) Nov. 10, elevation, 622.18 ft (192.03 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 49,730 acre-ft (61.3 hm^3) Jan. 29, 1976, elevation, 636.30 ft (193.944 m); minimum, 136 acre-ft (0.168 hm^3) Feb. 8, 1971, elevation, 516.20 ft (157.338 m).

01455400 LAKE HOPATCONG.--Lat 40°55'00", long 74°39'50", Morris County, Hydrologic Unit 02040105, in gatehouse of Lake Hopatcong Dam on Musconetcong River at Landing. Drainage area, 25.6 mi^2 (66.3 km^2). Period of record, current year. Monthend contents only prior to October 1950, published in WSP 1302. Gage, water-stage recorder. Prior to June 24, 1928, daily readings obtained by measuring from high-water mark to water surface converted to gage height, present datum. Datum of gage is 914.57 ft (278.761 m).

Lake is formed by concrete spillway and earthfill dam completed about 1828. Crest of spillway was lowered 0.11 ft (0.034 m) in 1925. Usable capacity, 7.459,000,000 gal (28.23 hm^3) between (gage height -2.6 ft or -0.792 m, sills of gates and 9.00 ft or 2.743 m, crest of spillway). Flow regulated by four gates (3 by 5 ft or 0.914 by 1.524 m), also by one 24-inch (0.610 m) pipe with gate valve to recreation fountain 250 ft (76.2 m) downstream from dam. Dead storage, about 8,117,000,000 gal (30.72 hm^3). Figures given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,399,000,000 gal (31.79 hm^3) Oct. 8, gage height, 10.11 ft (3.082 m); minimum, contents 5,591,000,000 gal (21.16 hm^3) Feb. 19, 20, 21, gage height, 6.69 ft (2.040 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,532,000,000 gal (32.29 hm^3) June 24, 1972, gage height, 10.27 ft (3.130 m); minimum, 1,525,000,000 gal (5.77 hm^3) Dec. 29, 1960, gage height, 0.65 ft (0.198 m).

01469200 STILL CREEK RESERVOIR.--Lat 40°51'25", long 75°59'30", Schuylkill County, PA, Hydrologic Unit 02040106, at dam on Still Creek, 1 mi (1.6 km) upstream from mouth and 2.3 mi (3.7 km) north of Hometown, PA. DRAINAGE AREA, 8.5 mi^3 (22.0 km^2). PERIOD OF RECORD, January 1933 to current year. Nonrecording gage. Datum of gage is NGVD (levels by Panther Valley Water Co.).

Reservoir formed by earth fill dam, with ungated concrete spillway at elevation 1,182.00 ft (360.274 m); storage began in February 1933. Capacity at elevation 1,182.00 ft (360.274 m) is 8,290 acre-ft (10.2 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Panther Valley Water Co.

EXTREMES FOR CURRENT YEAR: Maximum contents, 8,410 acre-ft (10.4 hm^3) Mar. 23, elevation, 1,182.42 ft (56.30 m); minimum, 6,600 acre-ft (8.14 hm^3) Sept. 30, elevation, 1,176.00 ft (362.96 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 8,570 acre-ft (10.6 hm^3) Oct. 15, 1955, elevation, 1,182.92 ft (360.554 m), but may have been greater during 1950 and 1951 water years; minimum (after initial filling), 588 acre-ft (0.725 hm^3) Dec. 8, 1944, elevation, 1,136.70 ft (346.466 m).

01472200 GREEN LANE RESERVOIR.--Lat 40°20'30", long 75°28'45", Montgomery County, PA, Hydrologic Unit 02040203, at dam on Perkiomen Creek at Green Lane, PA, 0.4 mi (0.6 km) west of Green Lane and 2.1 mi (3.4 km) upstream from Unami Creek. DRAINAGE AREA, 70.9 mi^2 (183.6 km^2). PERIOD OF RECORD, December 1956 to current year. GAGE, water-stage recorder. Datum of gage is NGVD (levels by Philadelphia Suburban Water Co.).

Reservoir formed by concrete, gravity-type dam, with ungated spillway at eleveation 286.00 ft (87.173 m); storage began December 21, 1956. Capacity at spillway level, elevation 286.00 ft (87.173 m), 13,430 acre-ft (16.6 hm^3). Reservoir is used for municipal water supply. Figures given herein represent total contents. Regulation is accomplished by valves on pipe through dam. Records furnished by Philadelphia Suburban Water Co.

EXTREMES FOR CURRENT YEAR: Maximum contents, 14,300 acre-ft (17.6 hm^3) May 5, elevation, 286.98 ft (88.574 m); minimum, 12,180 acre-ft (15.0 hm^3) Oct. 1, elevation, 284.55 ft (87.824 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,030 acre-ft (21.0 hm^3) June 23, 1972, elevation, 290.05 ft (88.407 m); minimum (after first filling), 1,270 acre-ft (1.57 hm^3) Aug. 25, 1957, elevation, 251.60 ft (76.688 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)
	01416900 PEPACTON RESERVOIR ‡			01424997 CANNONSVILLE RESERVOIR ‡			01428900 PROMPTON RESERVOIR †		
Sept. 30	1,262.54	119,541	-	1,145.99	92,518	-	1,126.05	3,710	-
Oct. 31	1,267.95	128,510	+448	1,151.62	101,225	+435	1,127.58	4,170	+7.5
Nov. 30	1,266.92	126,774	-89.5	1,150.33	99,149	-107	1,125.90	3,670	-8.4
Dec. 31	1,265.60	124,570	-110	1,149.95	98,542	-30.3	1,125.60	3,590	-1.3
CAL YR 1976	-	-	-97.7	-	-	-7.47	-	-	0
Jan. 31	1,259.01	113,881	-534	1,147.71	95,134	-170	1,125.33	3,510	-1.3
Feb. 28	1,256.76	110,354	-195	1,142.06	86,763	-463	1,130.54	5,110	+28.8
Mar. 31	1,281.50	152,585	+2,110	1,153.97	105,008	+911	1,131.10	5,300	+3.1
Apr. 30	1,280.32	150,392	-113	1,151.58	101,161	-198	1,128.90	4,590	-11.9
May 31	1,278.77	147,539	-142	1,149.44	97,766	-169	1,125.07	3,440	-18.7
June 30	1,272.58	136,475	-571	1,142.03	86,720	-570	1,125.02	3,430	-.2
July 30	1,264.28	122,386	-703	1,128.42	68,244	-922	1,125.01	3,420	-.2
Aug. 31	1,265.44	109,858	-625	1,121.61	59,749	-424	1,125.02	3,430	+.2
Sept. 30	1,263.67	121,384	+594	1,136.85	79,435	+1,020	1,129.90	4,910	+24.9
WTR YR 1977	-	-	+7.81	-	-	-55.5	-	-	+1.7

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)
	01429400 GENERAL EDGAR JADWIN RESERVOIR †			01431700 LAKE WALLENPAUPACK †			01433000 SWINGING BRIDGE RESERVOIR †		
Sept. 30	975.33	0	-	1,178.50	93,500	-	1,063.5	1,136	-
Oct. 31	982.41	136	+2.3	1,181.90	111,950	+300	1,066.4	1,245	+40.8
Nov. 30	975.76	0	-2.3	1,180.70	105,380	-110	1,060.6	1,031	-82.3
Dec. 31	975.40	0	0	1,180.10	102,140	-52.7	1,063.5	1,136	+38.9
CAL YR 1976	-	-	0	-	-	-7.5	-	-	+3.0
Jan. 31	975.08	0	0	1,173.70	68,040	-555	1,055.8	870	-99.2
Feb. 28	982.80	152	+2.7	1,175.30	76,390	+150	1,061.4	1,060	+78.4
Mar. 31	986.74	344	+3.1	1,183.60	121,360	+731	1,066.0	1,229	+63.4
Apr. 30	977.05	0	-5.8	1,184.50	126,400	+84.7	1,067.6	1,291	+24.0
May 31	975.00	0	0	1,186.50	137,650	+183	1,065.5	1,210	-30.3
June 30	974.90	0	0	1,184.30	125,280	-208	1,065.5	1,210	0
July 31	974.55	0	0	1,181.60	110,300	-244	1,062.2	1,088	-45.6
Aug. 31	974.65	0	0	1,179.50	98,900	-185	1,060.5	1,028	-22.5
Sept. 30	977.21	0	0	1,174.10	70,120	-484	1,067.2	1,276	+95.6
WTR YR 1977	-	-	0	-	-	-32.3	-	-	+4.4

Date	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million cu ft)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01433100	TORONTO RESERVOIR †		01433200	CLIFF LAKE RESERVOIR †		01435900	NEVERSINK RESERVOIR ‡	
Sept. 30	1,196.0	422	-	1,067.0	97.2	-	1,402.96	21,397	-
Oct. 31	1,197.4	454	+11.9	1,066.7	95.1	-.8	1,418.65	27,480	+304
Nov. 30	1,195.8	418	-14.0	1,064.8	82.4	-4.9	1,417.06	26,826	-33.7
Dec. 31	1,185.0	211	-77.1	1,064.0	77.3	-1.9	1,409.35	23,774	-152
CAL YR 1976	-	-	-10.2	-	-	+.3	-	-	+9.6
Jan. 31	1,186.7	240	+10.6	1,055.2	32.5	-16.7	1,398.95	19,976	-190
Feb. 28	1,189.7	293	+21.9	1,061.1	59.9	+11.3	1,395.36	18,752	-67.6
Mar. 31	1,205.5	658	+136	1,066.5	93.7	+12.6	1,434.82	34,639	+793
Apr. 30	1,213.5	883	+86.8	1,068.7	110	+6.1	1,438.10	36,213	+81.2
May 31	1,216.0	961	+29.3	1,065.5	87.0	-8.4	1,436.58	35,478	-36.7
June 30	1,216.3	971	+3.9	1,065.4	86.3	-.3	1,429.77	32,296	-164
July 31	1,209.8	775	-73.3	1,063.3	72.9	-5.0	1,412.12	24,849	-372
Aug. 31	1,201.1	544	-86.4	1,064.5	80.5	+2.8	1,394.45	18,450	-319
Sept. 30	1,195.2	404	-53.7	1,067.8	103	+8.6	1,392.86	17,928	-26.9
WTR YR 1977	-	-	-.6	-	-	+.2	-	-	-14.7

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01447780 FRANCIS E. WALTER LAKE ‡			01449400 PENN FOREST RESERVOIR †			01449700 WILD CREEK RESERVOIR †		
Sept. 30	1,301.62	2,160	-	995.56	17,980	-	819.21	11,840	-
Oct. 31	1,375.45	3,820	+27.0	1,000.36	20,190	+35.9	820.43	12,130	+4.7
Nov. 30	1,304.58	2,460	-22.9	1,000.10	20,040	-2.5	819.88	11,980	-2.5
Dec. 31	1,302.38	2,240	-3.6	1,000.02	19,990	-.8	819.76	11,950	-.5
CAL YR 1976	-	-	+.3	-	-	-.2	-	-	-.2
Jan. 31	1,300.02	2,000	-3.9	1,000.02	19,990	0	816.60	11,140	-13.2
Feb. 28	1,344.79	10,120	+146	998.15	19,150	-15.1	817.07	11,270	+2.3
Mar. 31	1,329.30	6,240	-63.1	1,000.38	20,200	+17.1	820.36	12,110	+13.7
Apr. 30	1,305.22	2,530	-62.3	1,000.19	20,090	-1.8	820.20	12,060	-.8
May 31	1,300.40	2,040	-8.0	1,000.00	19,980	-1.8	819.01	11,800	-4.2
June 30	1,300.45	2,040	0	998.36	19,240	-12.4	819.17	11,830	+.5
July 31	1,300.10	2,010	-.5	994.88	17,680	-25.4	819.02	11,800	-.5
Aug. 31	1,299.95	1,990	-.3	991.46	16,250	-23.3	818.20	11,590	-3.4
Sept. 30	1,311.66	3,300	+22.0	988.16	14,930	-22.2	818.23	11,600	+.2
WTR YR 1977	-	-	+1.6	-	-	-4.2	-	-	-.3

Date	Gage Height (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01455400 LAKE HOPATCONG †			01469200 STILL CREEK RESERVOIR †			01449790 BELTZVILLE LAKE †		
Sept. 30	‡8.26	6,848	-	1,181.42	8,120	-	628.23	41,490	-
Oct. 31	‡9.16	7,593	+37.2	1,182.15	8,330	+3.4	628.12	41,360	-2.1
Nov. 30	‡6.80	5,677	-98.8	1,181.88	8,250	-1.3	623.26	36,920	-74.6
Dec. 31	‡7.04	5,866	+9.4	1,182.00	8,290	+.6	628.73	41,940	+81.6
CAL YR 1976	-	-	+15.6	-	-	-.3	-	-	+.2
Jan. 31	‡6.96	5,803	-3.1	1,182.00	8,290	0	626.88	40,190	-28.5
Feb. 28	‡7.45	6,192	+21.5	1,181.00	7,990	-5.4	628.30	41,540	+24.3
Mar. 31	9.54	7,914	+85.9	1,182.17	8,340	+5.7	629.72	42,920	+22.4
Apr. 30	9.30	7,711	-10.5	1,182.17	8,340	0	628.27	41,510	-23.7
May 31	9.03	7,484	-11.3	1,181.83	8,240	-1.6	627.60	40,870	-10.4
June 30	9.05	7,501	-.9	1,181.00	7,990	-4.2	627.90	41,160	+4.9
July 31	8.51	7,053	-22.4	1,179.83	7,660	-5.4	627.16	40,450	-11.5
Aug. 31	8.39	6,955	-4.9	1,177.50	7,010	-10.6	626.39	39,720	-11.9
Sept. 30	8.51	7,053	+5.0	1,176.00	6,600	-6.9	625.08	38,520	-20.2
WTR YR 1977	-	-	+.9	-	-	-2.1	-	-	-4.1

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in ft³/s)
	01472200 GREEN LANE RESERVOIR †		
Sept. 30	284.54	12,170	-
Oct. 31	286.16	13,570	+22.8
Nov. 30	285.77	13,230	-5.7
Dec. 31	285.87	13,320	+1.5
CAL YR 1976	-	-	+.8
Jan. 31	285.70	13,170	-2.4
Feb. 28	286.09	13,510	+6.1
Mar. 31	286.01	13,440	-1.1
Apr. 30	286.03	13,460	+.3
May 31	285.70	13,170	-4.7
June 30	285.83	13,280	+1.8
July 31	285.37	12,870	-6.7
Aug. 31	285.70	13,170	+4.9
Sept. 30	285.15	12,680	-8.2
WTR YR 1977	-	-	+.7

‡ Elevation at 0900 hours on first day of following month.
† Elevation or gage height at 2400 hours.
a Observed.
e Estimated.
* Elevation at 0900 hours.

DIVERSIONS AND WITHDRAWALS

WITHDRAWALS FROM THE DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir, NY, on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Jan. 6, 1955. Records furnished by Board of Water Supply and Department of Water Resources, city of New York. REVISIONS (Water Years).--WRD-NY 1972: 1970.

01423900 Diversion from Cannonsville Reservoir, NY, on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Jan. 29, 1964. Records furnished by Board of Water Supply, city of New York.

01435800 Diversion from Neversink Reservoir, NY, on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of city of New York. No diversion prior to Dec. 3, 1953. Records furnished by Board of Water Supply and Department of Water Resources, city of New York.

01436520 Village of Woodbridge, NY, diverts water from East Pond Resource, tributary to Neversink River, for municipal supply outside of basin. Records furnished by Delaware River Basin Commission.

01437360 Diversion from Bear Swamp Reservoir, NY, tributary to Neversink River by the Otisville, New York State Training School for water supply outside of basin. Records furnished by Delaware River Basin Commission.

01447750 Diversion from Bear Creek, PA, tributary to Lehigh River, by Bear Creek Gas and Water Company for water supply outside of basin. Records furnished by Delaware River Basin Commission.

01448830 Diversion from Hazle Creek Watershed by Hazelton Joint Sewerage Authority for municipal water supply. Waste effluent from the municipal water system is released to the Susquehanna River. Records furnished by Delaware River Basin Commission.

01460500 Diversion by Delaware and Raritan Canal from Delaware River at Raven Rock, for municipal and industrial use. Water is discharged into the Raritan River at New Brunswick. Records of discharge are collected on the Delaware and Raritan Canal at Kingston, (see station 01460500).

01467480 Diversion from Mud Run, PA, tributary to Schuylkill River, by Mahonony Township Authority for municipal use outside of basin. Records furnished by Delaware River Basin Commission.

WITHDRAWALS BY CITY OF NEW YORK

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	PEPACTON RESERVOIR	CANNONSVILLE RESERVOIR	NEVERSINK RESERVOIR
October	697	191	224
November	650	56.2	240
December	695	284	306
CAL YR 1976	680	136	291
January	690	286	255
February	688	447	163
March	417	337	116
April	448	39.8	387
May	682	159	302
June	695	234	234
July	690	162	379
August	696	16.1	324
September	648	347	238
WTR YR 1977	642	212	264

MISCELLANEOUS WITHDRAWALS FROM BASIN

	EAST POND RESERVOIR	BEAR SWAMP RESERVOIR	BEAR CREEK	HAZLE CREEK	DELAWARE & RARITAN CANAL	MUD RUN
October	.5	.3	0	3.9	89.3	.62
November	.5	.3	0	3.9	88.8	.03
December	.5	.3	0	3.9	94.8	.03
CAL YR 1976	.5	.3	.52	3.9	90.8	.27
January	.5	.3	0	3.9	88.3	.03
February	.5	.3	0	3.9	88.4	.03
March	.5	.3	0	3.9	98.7	.08
April	.5	.3	4.5	3.9	96.1	.08
May	.5	.3	1.9	3.9	84.9	.08
June	.5	.3	0	3.9	88.8	.05
July	.5	.3	0	3.9	84.7	.05
August	.5	.3	0	3.9	83.8	.05
September	.5	.3	0	3.9	79.3	.05
WTR YR 1977	.5	.3	.53	3.9	88.8	.09

DIVERSIONS AND WITHDRAWALS--Continued

DIVERSIONS WITHIN THE DELAWARE RIVER BASIN

01463480 Diversion from the Delaware River at the Morrisville Filtration Plant for municipal supply, by the Borough of Morrisville, PA. The water withdrawn at this site is returned to the basin after treatment, only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Borough of Morrisville, PA.

01463500 Diversion from the Delaware River just above the Trenton gaging station for municipal supply by the city of Trenton, NJ. The water being withdrawn is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records furnished by the city of Trenton.

01467030 Diversion from the Delaware River at the Torresdale Intake for municipal supply, by the city of Philadelphia, PA. The water being withdrawn at this intake is returned to the basin after treatment only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Delaware River Basin Commission.

01474500 Diversion from the Schuylkill River at the Belmont and Queen Lanes Intakes for municipal supply, by the city of Philadelphia, PA. The water being withdrawn at these intakes is returned after treatment within the Delaware River basin only slightly diminished by consumptive uses and losses in transmission. Records furnished by the Delaware River Basin Commission.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	WITHDRAWAL BOROUGH OF MORRISVILLE	WITHDRAWAL CITY OF TRENTON	WITHDRAWAL CITY OF PHILADELPHIA		
			SCHUYLKILL RIVER		DELAWARE RIVER
			BELMONT	QUEEN LANE	TORRESDALE
October	6.7	49.4	111	161	326
November	6.7	47.6	111	159	326
December	5.8	47.2	114	164	333
CAL YR 1976	6.7	51.4	112	172	347
January	6.5	51.6	176	164	384
February	6.8	53.0	125	179	398
March	6.7	48.3	108	176	342
April	6.1	50.4	116	162	330
May	6.4	56.5	122	176	347
June	7.1	57.3	124	175	360
July	7.2	59.4	128	213	405
August	7.2	55.4	124	181	367
September	6.6	54.5	121	166	342
WTR YR 1977	6.7	52.6	123	173	355

DIVERSIONS IMPORTED INTO BASIN

01367630 Water diverted from Morris Lake, tributary to the Wallkill River (Hudson River basin), by the Newton Water and Sewer Authority for municipal use. After use the water is released into the Paulins Kill (Delaware River basin). Records furnished by the Delaware River Basin Commission.

01578420 Water diverted from West Branch Octoraro Creek (Susquehanna River basin) at the McCray Plant of the Octoraro Water Co., for municipal use. After use the water is released into the Delaware River basin. Records furnished by the Delaware River Basin Commission.

01578450 Water diverted from Octoraro Lake (Susquehanna River basin) by Chester Water Authority for municipal use. After use the water is released into the Delaware River basin. Records furnished by the Delaware River Basin Commission.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Month	MORRIS LAKE	OCTORARO CREEK	
		OCTORARO WATER CO.	CHESTER WATER AUTHORITY
October	1.19	1.81	44.9
November	1.14	1.67	45.3
December	1.19	1.59	45.9
CAL YR 1976	1.34	1.89	45.5
January	1.19	1.87	51.1
February	1.35	1.75	52.6
March	1.21	1.87	45.9
April	1.21	1.72	43.9
May	1.35	1.90	46.7
June	1.25	2.26	47.2
July	1.58	2.21	47.6
August	1.83	2.35	46.7
September	1.70	2.10	47.0
WTR YR 1977	1.35	1.92	47.1

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1977

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Maurice River basin				
01411450	Still Run at Aura, NJ	Lat 39°40'23", long 75°07'50", Gloucester County, at bridge on Aura-Glassboro Road, 0.4 mi (0.6 km) east of Aura, 1.0 mi (1.6 km) upstream of Silver Lake, and 2.6 mi (4.2 km) southeast of Glassboro.	3.21 (8.31 km^2)	1966, 1976-77	4-20-77 8-30-77	2.7 .96
01411456	Little Ease Run near Clayton, NJ	Lat 39°39'32", long 75°04'04", Gloucester County, at bridge on Academy Road, 0.9 mi (1.4 km) west of Fries Mill, 1.3 mi (2.1 km) east of Clayton, and 1.4 mi (2.3 km) downstream from Beaverdam Branch.	9.77 (25.30 km^2)	1966, 1976-77	4-20-77 8-29-77	5.5 2.0
01411462	Scotland Run at Franklinville, NJ	Lat 39°37'05", long 75°03'36", Gloucester County, at bridge on State Route 538, 0.9 mi (1.4 km) east of Franklinville, 2.7 mi (4.3 km) upstream of Malaga Lake, and 2.8 mi (4.5 km) southeast of Clayton.	14.8 (38.3 km^2)	1976-77	4-20-77 8-29-77	14 6.1
01411700	Muddy Run at Centerton, NJ	Lat 39°31'28", long 75°10'09", Salem County, 180 ft (55 m) downstream of unnamed right bank tributary, 200 ft (60 m) downstream of bridge on New Jersey Routes 540 and 553 in Centerton, and 4.7 mi (7.6 km) south of Elmer.	37.7 (97.6 km^2)	1976-77	4-20-77 8-29-77	16 21
01411850	Mill Creek near Millville, NJ	Lat 39°25'33", long 75°05'11", Cumberland County, at bridge on dirt road, 1.2 mi (1.9 km) upstream from mouth, 3.3 mi (5.3 km) northwest of Millville.	15.1 (39.1 km^2)	1973-77	4-20-77 8-30-77	6.3 2.9
01411950	Buckshutem Creek near Laurel Lake, NJ	Lat 39°20'51", long 75°03'47", Cumberland County, at bridge on State Route 555 (Dividing Creek Road), 1.3 mi (2.1 km) upstream of Gravelly Run, 1.8 mi (2.9 km) west of Laurel Lake, and 3.8 mi (5.2 km) southwest of Millville.	16.1 (41.7 km^2)	1976-77	4-20-77 8-30-77	1.8 .39
01412120	Muskee Creek near Port Elizabeth, NJ	Lat 39°18'56", long 74°57'31", Cumberland County, at bridge on State Route 548, 1.3 mi (2.1 km) east of Port Elizabeth, 1.9 mi (3.1 km) upstream from mouth, and 2.8 mi (4.5 km) northeast of Mauricetown.	13.1 (33.9 km^2)	1969, 1976-77	4-20-77 8-29-77	12 5.3
		Cohansey River basin				
01412405	Cohansey River near Beals Mill, NJ	Lat 39°31'29", long 75°15'59", Cumberland County, at bridge on Beals Mill Road, 1,300 ft (4,000 m) downstream of Beals Mill and Bostwick Lake, and 1.6 mi (3.0 km) west of Deerfield Street.	9.44 (24.4 km^2)	1976-77	4-21-77 8-29-77	5.0 3.9

Discharge measurements made at low-flow partial-record stations during water year 1977--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
Cohansey River basin--Continued						
01413010	Barrett Run near Bridgeton, NJ	Lat 39°26'58", long 75°15'42", Cumberland County, at bridge on Mary Elmer Drive, 1,800 ft (550 m) upstream from Mary Elmer Lake, and 2.1 mi (3.4 km) northwest of the intersection of State Routes 49 and 77 in Bridgeton.	7.02 (18.18 km^2)	1966, 1976-77	4-21-77 8-29-77	2.4 1.8
01413020	Indian Fields Branch at Bridgeton, NJ	Lat 39°26'04", long 75°13'08", Cumberland County, at bridge on Manheim Avenue in Bridgeton, 1,300 ft (4,000 m) upstream of East Lake.	4.64 (12.02 km^2)	1976-77	4-21-77 8-30-77	4.1 3.7
Stow Creek basin						
01413080	Raccoon Ditch at Davis Mill, NJ	Lat 39°25'26", long 75°22'01", Cumberland County, at bridge on County Highway 90 at Davis Mill, 2.8 mi (4.5 km) upstream from mouth and 4.3 mi (6.9 km) southwest of Shiloh.	3.19 (8.26 km^2)	1976-77	4-21-77 8-29-77	2.6 2.1
Delaware River basin						
01443450	Paulins Kill near Newton, NJ	Lat 41°04'59", long 74°46'57", Sussex County, at bridge at inlet to Paulins Kill Lake, 2.4 mi (3.9 km) northwest of Newton.	69.0 (178.7 km^2)	1973-77	8-29-77	6.8
01443460	Paulins Kill at Paulins Kill, NJ	Lat 41°03'08", long 74°49'42", Sussex County, at bridge on Paulins Kill Lake Road, 300 ft (90 m) downstream from Paulins Kill Lake, 0.45 mi (0.72 km) southwest of Paulins Kill.	72.9 (188.8 km^2)	1973-77	8-29-77	15
*01445000	Pequest River at Huntsville, NJ	Lat 40°58'49", long 74°46'38", Sussex County, on right bank 20 ft (6 m) upstream from highway bridge in Huntsville, 0.4 mi (0.6 km) downstream from East Branch.	31.4 (81.33 km^2)	1940-62‡, 1963-74, 1976-77	(a)	b3.1
*01446000	Beaver Brook near Belvidere, NJ	Lat 40°50'40", long 75°02'48", Warren County, on right bank, 2,000 ft (610 m) upstream from mouth and 2.0 mi (3.2 km) east of Belvidere.	36.2 (93.76 km^2)	1922-61‡, 1963-77	(c)	b2.0
01455370	Weldon Brook at Hurdtown, NJ	Lat 40°58'10", long 74°35'56", Morris County, at bridge on Union Turnpike at Hurdtown, 500 ft (150 m) downstream from Lake Shawnee Dam.	8.10 (20.98 km^2)	1973-77	4-22-77 8-30-77	9.7 .47
01474950	Mantua Creek at Glassboro, NJ	Lat 39°42'52", long 75°05'32", Gloucester County, at bridge at downstream end of Lake Oberst, and 1.5 mi (2.4 km) northeast of Glassboro.	1.20 (3.11 km^2)	1965-66, 1972, 1974-77	4-21-77 8-30-77	1.4 .43
01474970	Mantua Creek at Greentree Road at Glassboro, NJ	Lat 39°43'31", long 75°06'06", Gloucester County, at bridge on Greentree Road, 1.1 mi (1.8 km) upstream from Kressy Lake dam, and 1.3 mi (2.1 km) east of Pitman.	2.78 (7.20 km^2)	1965-66, 1972, 1974-77	4-21-77 8-30-77	3.4 2.4

* Also a crest-stage partial-record station.

‡ Operated as a continuous-record gaging station.

a Occurred during period Aug. 22 to Oct. 6, 1977.

b Minimum recorded during year; computed from minimum gage reading and rating, Discharge may have been lower at some time during year when gage was not operating.

c Occurred during period Aug. 18 to Oct. 4, 1977.

CREST-STAGE PARTIAL RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Cohansey River basin					
01412500	West Branch Cohansey River at Seeley, NJ	Lat 39°29'06", long 75°15'33", Cumberland County, on right bank 15 ft (4.6 m) upstream from county bridge, Highway 31, at Seeley, 450 ft (137 m) upstream from mouth and 4.1 mi (6.6 km) northwest of Bridgeton. Datum of gage is 42.23 ft (12.872 m) NGVD.	2.16 (6.60 km^2, Revised)	1952-67‡, 1968-77	d6-17-73 8-02-77	d3.00 5.36	d109 306
		Delaware River basin					
*01445000	Pequest River at Huntsville, NJ	Lat 40°58'49", long 74°46'38", Sussex County, on right bank, 20 ft (6.1 m) upstream from highway bridge in Huntsville, and 0.4 mi (0.6 km) downstream from East Branch. Datum of gage is 553.81 ft (168.801 m) NGVD.	31.4 (81.3 km^2)	1940-62‡, 1963-77	3-14-77	4.13	368
*01445490	Furnace Brook at Oxford, NJ	Lat 40°48'15", long 74°59'42", Warren County, at bridge on State Route 31 in Oxford, 2.4 mi (3.9 km) upstream from mouth, and 3.2 mi (5.1 km) north of Washington. Datum of gage is 468.14 ft (142.689 m) NGVD.	4.29 (11.11 km^2, Revised)	1966-77	8-03-67 5-29-68 8-05-69 4-02-70 d8-28-71 c6-23-72 6-29-73 9-04-74 7-14-75 d10-18-75 3-14-77	bd4.55 bd2.79 bd4.50 bd3.32 bd2.72 b2.53 b2.73 bd3.24 bd3.63 bd2.32 b2.67	390 110 c385 c168 c102 c84 c102 c160 c215 c68 98
*01446000	Beaver Brook near Belvidere, NJ	Lat 40°50'40", long 75°02'48", Warren County, on right bank, 2,000 ft (610 m) upstream from mouth, and 2 mi (3 km) east of Belvidere. Datum of gage is 303.36 ft (92.464 m) NGVD.	36.2 (93.8 km^2)	1922-61‡, 1963-77	3-14-77	4.15	675
01455200	Pohatcong Creek at New Village, NJ	Lat 40°42'57", long 75°04'20", Warren County, at bridge on Edison Road, 0.4 mi (0.6 km) southeast of New Village, and 4.3 mi (6.9 km) upstream from Merrill Creek. Datum of gage is 308.32 ft (Revised, 93.976 m) NGVD.	33.4 (86.5 km^2)	1960-69‡, 1972-77	3-23-77	4.31	723
01455500	Musconetcong River at outlet of Lake Hopatcong, NJ	Lat 40°55'00", long 74°39'55", Morris County, on left bank just upstream of highway bridge 300 ft (91 m) downstream from Lake Hopatcong Dam in Landing. Datum of gage is 904.99 ft (275.841 m) NGVD.	25.6 (66.3 km^2)	1929-75‡ 1976-77	10-07-75 3-23-77	3.61 3.58	d253 248
01456000	Musconetcong River at Hackettstown, NJ	Lat 40°53'10", long 74°48'00", Warren County, on right bank 75 ft (23 m) upstream from Saxon Falls Dam, 0.5 mi (0.8 km) upstream from Erie-Lackawanna Railway bridge, and 3.0 mi (4.8 km) northeast of Hackettstown. Datum of gage is 630.93 ft (192.307 m) NGVD.	70.0 (181.3 km^2)	1921-73‡, 1974-77	3-23-77	2.75	965

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Delaware River basin--Continued					
01457500	Delaware River at Riegelsville, NJ	Lat 40°35'36", long 75°11'17", Warren County, at suspension bridge at Riegelsville, 600 ft (183 m) upstream from Musconetcong River (flow of which is included in the records for this station since Oct. 1, 1931). Datum of gage is 125.12 ft (38.137 m) NGVD.	6,328 (16,390 km^2)	1906-71‡, 1972-77	3-14-77	22.16	117,000
01464400	Crosswicks Creek at New Egypt, NJ	Lat 40°04'03", long 74°31'57", Ocean County, at upstream side of bridge on State Route 528 in New Egypt, and 300 ft (91 m) downstream from Oakford Lake dam. Datum of gage is 43.46 ft (13.247 m) NGVD.	37.5 (97.1 km^2, Revised)	1968-77	8-28-71 11-30-71 d11-09-72 12-21-73 9-25-75 6-28-76 2-26-77	d26.3 19.77 d21.30 22.48 20.92 19.75 19.60	1,940 d720 d1,000 d1,200 d925 d720 700
01464505	Crosswicks Creek at Groveville, NJ	Lat 40°10'26", long 74°40'48", Burlington County, at U.S. Highway 130 bridge, 0.3 mi (0.5 km) upstream from Doctors Creek, 0.5 mi (0.8 km) northwest of Groveville, and 0.6 mi (1.0 km) southwest of Yardville. Datum of gage is -2.15 ft (-0.66 m) NGVD.	94.5 (244.8 km^2)	1968-77	9-25-75 1-28-76 2-26-77	b13.47 b11.60 b10.34	† † †
01464515	Doctors Creek at Allentown, NJ	Lat 40°10'37", long 74°35'57", Monmouth County, at bridge on Breza Road in Allentown, and 0.8 mi (1.3 km) downstream from Comines Mill pond dam. Datum of gage is NGVD.	17.2 (44.6 km^2)	1968-77	2-26-77	b55.94	†
01464520	Doctors Creek at Groveville, NJ	Lat 40°10'21", long 74°39'33", Mercer County, at bridge on Groveville-Allentown road at Groveville, 0.7 mi (1.1 km) southeast of Yardville, and 1.5 mi (2.4 km) upstream of mouth. Datum of gage is 14.23 ft (4.337 m) NGVD.	25.3 (65.53 km^2, Revised)	1968-77	2-26-77	b7.06	530
01465850	South Branch Rancocas Creek at Vincentown, NJ	Lat 39°56'22", Long 74°45'50", Burlington County, on left bank 150 ft (46 m) downstream from highway bridge on Lumberton-Vincentown road, 0.8 mi (1.3 km) west of Vincentown, 2.9 mi (4.7 km) southeast of Lumberton, and 3.1 mi (5.0 km) upstream from Southwest Branch. Datum of gage is 13.17 ft (4.014 m) NGVD.	53.3 (138.0 km^2)	1962-75‡ 1976-77	3-23-77	5.42	408
01465882	Southwest Branch Rancocas Creek at Medford, NJ	Lat 39°54'16", long 74°48'47", Burlington County, at bridge on State Route 70, 0.6 mi (1.0 km) northeast of Medford and 4.2 mi (6.8 km) upstream from mouth. Datum of gage is 20.72 ft (6.315 m) NGVD.	33.8 (87.5 km^2)	1975-77	3-23-77	b3.03	305
01466000	Middle Branch Mount Misery Brook in Lebanon State, Forest, NJ	Lat 39°55'00", long 74°30'30", Burlington County, in Lebanon State Forest, 20 ft (6.1 m) upstream from bridge on North Branch Road, and 5.1 mi (8.2 km) southeast of Browns Mills. Datum of gage is 99.71 ft (30.392 m) NGVD.	2.73 (7.07 km^2)	1952-65‡, 1967-77	3-23-77	1.59	4.4

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Delaware River basin--Continued					
01467057	Pompeston Creek at Cinniminson, NJ	Lat 40°00'11", long 74°59'00", Burlington County, at U.S. Route 130 bridge, 0.7 mi (1.1 km) northwest of Cinniminson, 1.7 mi (2.7 km) upstream from mouth, and 2.1 mi (3.4 km) east of Palymra. Datum of gage is 11.36 ft (3.463 m) NGVD.	5.75 (14.89 km^2)	1975-77	8-14-77	b5.06	†
01467069	North Branch Pennsauken Creek near Moorestown, NJ	Lat 39°57'10", long 74°58'10", Burlington County, at bridge on Route 41 (Kings Highway) 1.7 mi (2.8 km) southwest of Moorestown.	12.8 (33.2 km^2)	1975-77	3-22-77	4.66	385
*01467130	Cooper River at Kirkwood, NJ	Lat 39°50'11", long 75°00'06", Camden County, 5 ft (1.5 m) upstream from dam at Kirkwood Lake in Kirkwood, and 1.0 mi (1.6 km) north of Laurel Springs. Datum of gage is 57.82 ft (17.624 m) NGVD.	5.14 (13.3 km^2)	1964-77	3-22-77	1.20	83
*01467160	North Branch Cooper River near Marlton, NJ	Lat 39°53'20", long 74°58'08", Camden County, at bridge on blacktop road to Springdale, 2.5 mi (4.0 km) west of Marlton. Datum of gage is 36.36 ft (11.083 m) NGVD.	5.33 (13.80 km^2)	1964-77	3-22-77	b3.03	†
*01467305	Newton Creek at Collingswood, NJ	Lat 39°54'30", long 75°03'13", Camden County, at bridge on Park Avenue in Collingswood, 0.3 mi (0.5 km) east of Cuthbert Avenue. Datum of gage is 18.74 ft (5.712 m) NGVD.	1.32 (3.42 km^2)	1964-77	8-24-77	3.69	177
01467317	South Branch Newton Creek at Haddon Heights, NJ	Lat 39°52'45", long 75°04'26", Camden County, at bridge in Haddon Heights Park in Haddon Heights, and 2.6 mi (4.2 km) south of Collingswood. Datum of gage is 23.34 ft (7.114 m) NGVD.	.63 (1.63 km^2)	1964-77	8-24-77	2.98	30
*01467330	South Branch Big Timber Creek at Blackwood, NJ	Lat 39°48'17", long 75°03'13", Camden County, at bridge on Lower Landing Road in Blackwood, and 3.0 mi (4.8 km) upstream from mouth. Datum of gage is 8.41 ft (2.563 m) NGVD.	19.1 (49.5 km^2, Revised)	1964-77	3-22-77	3.75	350
01467351	North Branch Big Timber Creek at Laurel Road at Laurel Springs, NJ	Lat 39°49'07", long 75°00'56", Camden County, at bridge on Laurel Road in Laurel Springs, and 2.5 mi (4.0 km) upstream from confluence with the south Branch. Datum of gage is 26.89 ft (8.196 m) NGVD.	7.16 (18.54 km^2)	1976-77	10-09-76	1.53	137
0147500	Mantua Creek at Pitman, NJ	Lat 39°44'14", long 75°06'53", Gloucester County, on left abutment of Wadsworth Dam, 0.9 mi (1.4 km) east of Pitman, and 2.0 mi (3.2 km) upstream from Porch Branch. Datum of gage is 68.51 ft (20.882 m) NGVD.	6.75 (17.48 km^2)	1940-76‡, 1977	9-01-40 7-12-77	6.64 1.37	g4,200 46
01475019	Mantua Creek at Salina, NJ	Lat 39°46'13", long 75°05'59", Glouchester County, at bridge on Salina-Sewell Road, 0.2 mi (0.3 km) downstream of Bees Branch, and 0.5 mi (0.8 km) west of Salina. Datum of gage is 11.67 ft (3.557 m) NGVD.	14.2 (36.8 km^2)	1975-77	9-20-77	3.41	252

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Delaware River basin--Continued					
01477480	Oldmans Creek near Harrisonville, NJ	Lat 39°41'40", long 75°18'38", Salem County, at bridge on Harrisonville Station Road, 2.4 mi (3.8 km) west of Harrisonville, and 2.8 mi (4.5 km) north of Woodstown. Datum of gage is 16.58 ft (5.054 m) NGVD.	13.6 ($35.2\ km^2$)	1975-77	3-22-77	4.30	215

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Downstream side of bridge.
c Not previously published.
d Revised.
f At former site and datum.
g Previously publisehd qualification of this peak discharge is incorrect. Figure represents only flow over dam and earth dike, and does not include flow through break in earth dike.

TIDAL CREST-STAGE STATIONS

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above NGVD unless otherwise noted. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Period of record	Annual maximum: Date	Annual maximum: Elevation NGVD (feet)
01411395	Cape May Canal at North Cape May, NJ	Lat 38°58'02", long 74°57'25", Cape May County, on Cape May Canal on slip of Cape May, New Jersey to Lewes, Delaware, Ferry, 0.5 mi (0.8 km) from west end of Cape May Canal, and 0.8 mi (1.3 km) south of North Cape May.	1965-77	12-09-73 12-02-74 3-16-76 9-25-76	ad5.97 ad6.14 ad5.31 d5.28
01412150	Maurice River at Bivalve, NJ	Lat 39°13'42", long 75°02'12", Cumberland County, on right bank on bulkhead piling on the south side of Bivalve, and 1.3 mi (2.1 km) south of Port Norris.	1965-77	9-25-77	c7.08
01482705	Delaware River at Oakwood Beach, NJ	Lat 39°33'18", long 75°31'11", Salem County, on left bank on bulkhead piling at Oakwood Beach, 1.3 mi (2.1 km) south of mouth of Salem River, 2.4 mi (3.9 km) east of Reedy Point, Delaware, and 3.0 mi (4.8 km) southwest of Salem.	1965-77	10-09-76	c7.88

‡ Operated as a continuous-record gaging station.
a Revised.
b Furnished by Atlantic City Electric Co.
c Gage datum; not NGVD datum.
d Furnished by National Ocean Survey, adjusted to NGVD.

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1977

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Cohansey River basin				
01413022 Jackson Run	Indian Fields Branch	Lat 39°26'00", long 75°13'24", Cumberland County, 300 ft (91 m) downstream of Irving Avenue in Bridgeton, 300 ft (91 m) above mouth at East Lake.	1.76 (4.56 km^2)	-	7-12-77 8- 2-77 8- 3-77 8-10-77@1100 8-10-77@1215	3.5 *0.001 0.026 5.2 3.7
		Delaware River basin				
01446400 Pequest River	Delaware River	Lat 40°49'45", long 75°04'44", Warren County, at bridge on State Route 519, in Belvidere, 1400 ft (430 m) upstream of mouth.	158 (409 km^2)	1950,53, 1955,74	9-23-77	*49
01455900 Deer Park Pond Outlet	Musconetcong River	Lat 40°54'14", long 74°46'58", Warren County, at bridge on medium-duty road, 500 ft (150 m) upstream of mouth, 0.6 mi (1.0 km) downstream of Deer Park Pond, 1.3 mi (2.1 km) northeast of Saxton Falls, and 1.7 mi (2.7 km) southwest of Waterloo.	1.18 (3.06 km^2)	-	8- 3-77@1145 8- 3-77@1215 8- 3-77@1240 9-20-77 9-26-77@1300 9-26-77@1330	0.37 0.24 0.20 *0 0.25 0.23
01456060 Musconetcong River Tributary	Musconetcong River	Lat 40°51'03", long 74°49'25", Warren County, at bridge on Willow Grove Street above State Fish Hatchery, in Hackettstown, and 700 ft (210 m) upstream of mouth.	1.60 (4.14 km^2)	-	7-30-77 8- 3-77@1330 8- 3-77@1350 8- 3-77@1415 9-20-77@1055 9-20-77@1130 9-20-77@1210 9-20-77@1245 9-26-77@1500 9-26-77@1530	*0.36 17 15 15 0.77 0.57 1.6 4.8 11 5.1
01456400 Musconetcong River Tributary No. 5	Musconetcong River	Lat 40°46'44", long 74°54'02", Hunterdon County, at bridge on light-duty road at Penwell, 800 ft (240 m) above mouth, and 0.9 mi (1.5 km) southeast of Port Murray.	1.89 (4.90 km^2)	-	7-30-77 8- 3-77@1350 8- 3-77@1415 8- 3-77@1650 9-20-77@1345 9-20-77@1415 9-20-77@1445 9-26-77@1110 9-26-77@1135	*0.66 3.2 6.5 15 2.8 3.7 3.2 4.5 4.0
01456890 Musconetcong River Tributary No. 4	Musconetcong River	Lat 40°40'53", long 75°03'01", Warren County, at bridge on Bloomsbury Road, 800 ft (240 m) upstream of mouth, 1.6 mi (2.6 km) northwest of West Portal, and 2.7 mi (4.3 km) northeast of Bloomsbury.	1.13 (2.93 km^2)	-	8- 3-77 9-20-77@1410 9-20-77@1510 9-20-77@1550 9-20-77@1620	0.12 0.27 0.22 0.17 0.13
01457400 Musconetcong River	Delaware River	Lat 40°35'32", long 75°11'20", Warren County, at bridge on State Highway 13 at Riegelsville, 0.2 mi (0.4 km) north of Mount Joy, and 0.2 mi (0.3 km) upstream from mouth.	156 (404 km^2)	1940-55, 1973	9-29-77	161
01461280 Wickecheoke Creek Tributary	Wickecheoke Creek	Lat 40°26'51", long 74°57'30", Hunterdon County, at site 0.4 mi (0.6 km) upstream of Pine Hill Road, 0.5 mi (0.8 km) upstream of mouth, 0.8 mi (1.3 km) west of Sergeantsville, and 3.1 mi (5.0 km) north of Stockton.	1.04 (2.69 km^2)	-	8- 3-77@1150 8- 3-77@1220	0.34 0.31
01461900 Alexauken Creek	Delaware River	Lat 40°22'51", long 74°56'54", Hunterdon County, at bridge on State Route 29, 1.1 mi (1.8 km) north of Lambertville, and 0.4 mi (0.6 km) upstream of mouth.	14.9 (38.6 km^2)	-	9-29-77	4.0

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1977--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Delaware River basin--Continued				
01463625 Assunpink Creek	Delaware River	Lat 40°16'06", long 74°42'07", Mercer County, at bridge on Basin Road, midway between US Route 1 and Penn Central railroad tracks, 0.5 mi (0.8 km) southeast of Bakersville, and 1.4 mi (2.3 km) southeast of Franklin Corner.	38.6 (100.0 km²)	-	9-20-77	*18
01464503 Crosswicks Creek	Delaware River	Lat 41°13'21", long 74°28'33", Sussex County, at bridge on New Jersey Turnpike, 0.6 mi (1.0 km) northwest of Crosswicks, 1.1 mi (2.8 km) south east of Groveville, and 2.5 mi (6.5 km) upstream of Doctors Creek.	93.7 (242.7 km²)	-	10- 9-76@0945	62
					10- 9-76@1030	60
					10- 9-76@1230	77
					10- 9-76@1300	88
					10-21-76@1030	294
					10-21-76@1300	284
					10-21-76@1400	295
					10-22-76	295
					4- 5-77@0945	302
					4- 5-77@1000	337
01483010 Deep Run	Alloway Creek	Lat 39°32'33", long 75°21'18", Salem County, at bridge on Telegraph Road, 0.8 mi (1.3 km) upstream of Elkinton Millpond, 1.3 mi (2.1 km) south of Alloway, and 2.5 mi (4.0 km) northwest of Pecks Corner.	5.30 (13.73 km²)	-	7- 7-77	2.1
					7-12-77	2.4
					8- 2-77	3.6
					8-10-77	1.8
					8-23-77	1.7
4000460745159 South Branch Mill Creek	Mill Creek	Lat 40°00'46", long 74°51'59", Burglington County, at end of Ember Lane at Rancocas, 2.5 mi (4.0 km) upstream of mouth and 3.7 mi (6.0 km) east of Bridgeboro.	0.21 (0.54 km²)	1976	10-20-76@1215	0.15
					10-20-76@1420	0.097
					10-20-76@1445	0.13
					10-20-76@1600	0.19
					10-20-76@1720	0.28
					10-20-76@1740	0.38
4001110745148 Mill Creek Tributary No. 2	Mill Creek	Lat 40°01'11", long 74°51'48", Burlington County, at the foot of Eaton Lane in Willingboro, 1000 ft (300 m) upstream of Evergreen Drive. 1.3 mi (2.1 km) upstream of mouth and 0.6 mi (1.0 km) north of Rancocas.	0.13 (0.34 km²)	1976	10-20-76@1255	0.076
					10-20-76@1340	[illegible]
					10-20-76@1500	0.090
					10-20-76@1520	0.097
					10-20-76@1600	.12
					10-20-76@1750	.21
					10-20-76@1810	.23

* Base flow.
† Peak flow.
a Not previously published.

HUNTERDON COUNTY

402644074563601. Local I.D., Bird Obs.
LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, at U.S. Post Office, Sergeantsville.
Owner: Phillip Fleming.
AQUIFER.--Stockton Formation of Triassic Age.
WELL CHARACTERISTICS.--Dug unused Water-table well, diameter 36 in (914 mm), depth 21 ft (6.4 m), lined with stone.
DATUM.--Altitude of land-surface datum, 342 ft (104.2 m). Measuring point: Top edge of recorder shelf, 1.5 ft (0.46 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--June 1965 to July 1970 and current year beginning May 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.98 ft (2.737 m) below land-surface datum, Mar. 28, 1969; lowest water level, 16.40 ft (4.999 m) below land-surface datum, Nov. 9, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 12.83 ft (3.911 m) below land-surface datum, Sept. 28-29, lowest water level, 16.28 ft (4.962 m) below land-surface datum, Sept. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	15.25	15.64	14.64	15.61
10	---	---	---	---	---	---	---	---	15.18	15.70	14.59	15.93
15	---	---	---	---	---	---	---	---	14.97	13.50	13.20	16.19
20	---	---	---	---	---	---	---	---	15.31	14.61	13.94	16.14
25	---	---	---	---	---	---	---	14.74	15.46	15.24	14.73	15.26
EOM	---	---	---	---	---	---	---	15.05	15.54	15.60	15.13	13.03
MEAN	---	---	---	---	---	---	---	14.88	15.24	15.07	14.47	15.42

WTR YR 1977 MEAN 15.04 HIGH 12.86 SEP 29 LOW 16.27 SEP 17

SALEM COUNTY

394037075191501. Local I.D., Point Airy Obs.
LOCATION.--Lat 39°40'37", long 75°19'14", Hydrologic Unit 02040206, at intersection of Point Airy and Woodstown-Swedesboro Roads 1 mi (1.61 km) north of Woodstown Boro boundary.
Owner: U.S. Geological Survey.
AQUIFER.--Magothy-Raritan undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 672 ft (205 m), screened 664 to 672 ft (202 to 205 m).
DATUM.--Altitude of land-surface datum, 73.0 ft (22.25 m). Measuring point: Top of 6 inch casing, 1.8 ft (0.55 m) above land-surface datum.
REMARKS.--
PERIOD OF RECORD.--February 1959 to August 1975 and current year beginning March 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft (23.942 m) below land-surface datum, Mar. 6, 1959; lowest water level, 100.52 ft (30.638 m) below land-surface datum, Aug. 6-7, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 95.90 ft (29.230 m) below land-surface datum, Mar. 18; lowest water level, 100.52 ft (30.638 m) below land-surface datum, Aug. 6-7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	96.18	96.65	98.22	98.10	100.30	100.09
10	---	---	---	---	---	---	96.56	96.69	97.67	98.23	100.33	99.89
15	---	---	---	---	---	96.19	96.56	96.99	97.71	98.52	100.06	100.00
20	---	---	---	---	---	96.41	96.74	97.20	97.84	99.01	100.19	99.71
25	---	---	---	---	---	96.49	96.58	97.54	97.94	99.82	100.31	99.56
EOM	---	---	---	---	---	96.48	96.76	98.26	97.95	99.73	100.41	99.24
MEAN	---	---	---	---	---	96.36	96.57	97.13	97.90	98.84	100.19	99.83

WTR YR 1977 MEAN 98.20 HIGH 96.05 MAR 18 LOW 100.41 AUG 31

WARREN COUNTY

405050075033201. Local I.D., Hoffmann LaRoche 4 Obs.
LOCATION.--Lat 40°50'50", long 75°03'32", Hydrologic Unit 02040105, 1 mi (1.6 km) northeast of Belvidere on Route 46. Owner: Hoffmann LaRoche, Inc.
AQUIFER.--Glacial Till of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled well, diameter 8 in (203 mm), depth 128 ft (39.0 m).
DATUM.--Altitude of land-surface datum is 290 ft (88.4 m). Measuring point: Top edge of recorder shelf, 2.. ft (0.67 m) above land-surface.
REMARKS.--
PERIOD OF RECORD.--1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.10 ft (9.174 m) below land-surface datum, July 5, 1972; lowest water level, 46.59 ft (14.201 m) below land-surface datum, Sept. 18, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 34.49 ft (10.513 m) below land-surface datum, Apr. 10; lowest water level, 46.59 ft (14.201 m) below land-surface datum, Sept. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.94	43.44	44.63	45.11	---	43.77	34.59	39.54	43.53	44.78	45.17	46.23
10	45.79	43.35	44.67	45.27	---	41.86	34.50	40.30	43.96	44.67	45.44	46.39
15	44.93	43.56	44.48	45.41	46.28	40.06	35.12	40.94	44.28	44.40	45.69	46.54
20	44.86	43.87	44.57	---	46.29	37.43	36.43	41.57	44.56	44.31	45.90	46.55
25	44.32	44.20	44.76	---	46.19	35.87	37.78	42.20	44.75	44.29	46.01	46.28
EOM	43.80	44.27	44.99	---	45.31	34.64	38.64	42.95	44.98	44.78	46.21	45.30
MEAN	45.03	43.73	44.64	45.23	46.14	39.47	35.90	41.01	44.20	44.56	45.64	46.29

WTR YR 1977 MEAN 43.28 HIGH 34.50 APR 10 AND OTHERS LOW 46.58 SEP 17

NOTE.--No record Jan. 18-Feb. 14.

(Aquifer code disignations and column heading explanations are listed on p. 322)

CAMDEN COUNTY

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	TOTAL DEPTH OF WELL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)
NJ WC-EGBERT STA OBS	39 52 46	075 04 33	01	211MGRR	77-09-08	1300	479	455	455	445

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	INSTAN-TANEOUS FLOW RATE (GPM)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)
NJ WC-EGBERT STA OBS	77-09-08	23.80	215	496	12	195	7.5	14.5	25	7

LOCAL IDENT-I-FIER	DATE OF SAMPLE	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	TOTAL CAL-CIUM (CA) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
NJ WC-EGBERT STA OBS	77-09-08	5	48	0	14	14	3.2	3.1	14	14

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TOTAL PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL FLUO-RIDE (F) (MG/L)
NJ WC-EGBERT STA OBS	77-09-08	7.4	7.4	74	0	61	3.7	14	4.4	.2

LOCAL IDENT-I-FIER	DATE OF SAMPLE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)
NJ WC-EGBERT STA OBS	77-09-08	.2	8.5	113	.01	.00	.17	.00	.17

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)
NJ WC-EGBERT STA OBS	77-09-08	.18	.05	.00	6.3

CAMDEN COUNTY--Continued

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NJ WC-EGBERT STA OBS	39 52 46	075 04 33	01	211MGRH	77-09-08	1300	0	0	10	0

LOCAL IDENT-I-FIER	DATE OF SAMPLE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)
NJ WC-EGBERT STA OBS	77-09-08	3	1600	1000	26	40	0

LOCAL IDENT-I-FIER	DATE OF SAMPLE	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NJ WC-EGBERT STA OBS	77-09-08	40	.0	3	20

CAPE MAY COUNTY

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
WEST CAPE MAY 1 OBS	38 56 07	074 55 52	01	121CNSY	77-09-15	1650	15.2	2290	7.5	490
CAPE MAY CITY WD COLUM 1	38 56 13	074 54 57	01	121CNSY	77-09-15	1300	15.0	2960	--	850
CAPE MAY CITY WD 1	38 56 43	074 55 33	01	121CNSY	77-08-31	0930	15.1	804	7.3	140
HARBESON-WALKER REF CO 2	38 56 43	074 57 55	01	121CNSY	77-08-31	1005	15.5	982	7.4	196
HARBESON-WALKER REF CO 1	38 56 45	074 58 03	01	121CKKD	77-08-31	1015	15.9	1590	8.1	270
CAPE MAY CITY WD 2	38 57 01	074 55 28	01	121CNSY	77-08-31	0925	15.3	380	7.4	40
CAPE MAY CITY WD 3	38 57 24	074 55 21	01	121CNSY	77-08-31	0915	15.3	326	7.4	22
HIGBEE BEACH 3 OBS	38 58 04	074 57 42	01	121CNSY	77-09-16	1515	16.0	300	7.8	16
LOWER TWP WC 1	38 58 53	074 57 12	01	121CNSY	77-08-31	1310	15.0	275	7.6	14
LOWER TWP WC 2	38 59 05	074 56 25	01	121CNSY	77-08-31	1330	15.5	237	7.5	13
WILDWOOD WD RIO GRAND 38	39 01 35	074 53 52	01	122KRKD	77-08-31	1350	17.0	370	8.1	30
WILDWOOD WD RIO GRAND 36	39 01 37	074 53 52	01	112CPMY	77-08-31	1400	13.5	223	6.1	26
WILDWOOD WD RIO GRAND 31	39 01 38	074 53 50	01	112ESRNS	77-08-31	1410	13.4	206	7.5	13
WILDWOOD WD RIO GRAND 29	39 01 39	074 53 49	02	121CNSY	77-08-31	1415	14.3	168	7.4	12

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER- BEARING ZONE (FT)	DEPTH TO BOT- TOM OF WATER- BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	INSTAN- TANEOUS FLOW RATE (GPM)
WEST CAPE MAY 1 OBS	77-09-15	6.60	--	293	--	--	283	293	80	15
CAPE MAY CITY WD COLUM 1	77-09-15	11.00	331	325	280	325	281	321	165	15
CAPE MAY CITY WD 1	77-08-31	12.00	--	306	92	--	277	306	25	700
HARBESON-WALKER REF CO 2	77-08-31	10.00	270	268	200	--	235	265	10	500
HARBESON-WALKER REF CO 1	77-08-31	10.00	385	327	296	327	296	321	100	400
CAPE MAY CITY WD 2	77-08-31	12.00	322	282	--	--	174	282	1440	800
CAPE MAY CITY WD 3	77-08-31	15.00	--	276	--	--	--	276	1440	800
HIGBEE BEACH 3 OBS	77-09-16	6.00	--	250	--	--	240	250	90	6.0
LOWER TWP WC 1	77-08-31	18.00	285	262	200	--	241	262	10	750
LOWER TWP WC 2	77-08-31	12.00	--	247	--	--	212	247	10	550
WILDWOOD WD RIO GRAND 38	77-08-31	10.00	592	592	--	--	461	590	300	1000
WILDWOOD WD RIO GRAND 36	77-08-31	9.00	63	63	--	--	48	63	420	250
WILDWOOD WD RIO GRAND 31	77-08-31	10.00	141	135	92	139	108	135	10	270
WILDWOOD WD RIO GRAND 29	77-08-31	8.00	258	244	--	--	191	231	60	800

CUMBERLAND COUNTY

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NJDIA LEESBURG SP FARM 1	39 13 56	074 57 51	01	122KRKD	77-07-21	0845	14.6	177	8.1	4.5
FORTESQUE REALTY 4	39 14 20	075 10 23	02	122KRKD	77-07-21	1000	15.4	231	8.0	6.5
MONEY ISL MARINA 1	39 17 04	075 14 15	01	124PNPN	77-07-21	1120	--	739	8.0	77
BAY PT ROD & GUN CLUB 2	39 17 46	075 15 10	02	124PNPN	77-07-21	1215	--	734	8.0	81
SEA BREEZE TAVERN 2	39 19 26	075 19 21	01	124PNPN	77-07-21	1345	--	698	7.9	68

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
NJDIA LEESBURG SP FARM 1	77-07-21	13.00	--	268	--	248	268	10	195
FORTESQUE REALTY 4	77-07-21	8.00	--	303	--	283	303	10	200
MONEY ISL MARINA 1	77-07-21	4.00	--	370	--	350	370	15	50
BAY PT ROD & GUN CLUB 2	77-07-21	5.00	417	417	330	397	417	10	50
SEA BREEZE TAVERN 2	77-07-21	4.00	354	354	260	281	354	15	20

GLOUCESTER COUNTY

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
CLAYTON BORO WD 3	39 39 12	075 05 22	01	211MGRR	76-11-05	1320	20.3	1020	8.1	142
				211MGRR	77-09-14	0930	21.0	1040	7.6	140
CLAYTON BORO WD 4	39 40 13	075 05 58	01	211MGRR	76-11-05	1345	19.7	851	8.0	98
OWENS ILLINOIS 1	39 41 47	075 07 14	01	211MGRR	77-09-14	1000	19.5	736	7.7	65
GLASSBORO BORO WD 3	39 42 05	075 07 53	01	211MGRR	77-09-14	1100	19.0	727	7.6	68
PITMAN BORO WD P1	39 44 05	075 07 45	01	211MGRR	77-09-14	1140	17.0	523	7.4	44
SO JERSEY WS CO 3	39 44 08	075 13 30	02	211MGRR	76-11-05	1120	14.9	786	7.4	140
				211MGRR	77-09-14	1315	15.5	992	7.5	160
SWEDESBORO BORO WD 2	39 44 38	075 18 33	01	211MGRR	77-09-16	1330	14.3	432	6.2	62
WOODBURY CTY WD-SEWELL 1	39 46 27	075 08 13	02	211MGRR	77-09-16	1030	15.1	380	7.2	25
SEWELL WC 2	39 46 29	075 08 59	01	211MGRR	77-09-16	1130	16.0	419	7.3	29
MANTUA WC 3	39 47 32	075 10 36	01	211MGRR	77-09-16	1200	--	437	7.2	35
WENONAH BORO WD 2	39 47 51	075 09 12	01	211MGRR	77-09-16	1300	14.5	362	7.2	22
PENNS GROVE WC-BRIDGPT 2	39 47 55	075 21 08	02	211MGRR	77-09-21	0930	13.9	196	--	14
EI DUPONT REPAUNO 3	39 49 36	075 17 47	01	211MGRR	77-09-21	1000	--	687	5.5	140
EI DUPONT REPAUNO 6	39 49 44	075 17 34	01	211MGRR	77-09-21	1015	14.0	570	4.5	130
WOODBURY WD RAILROAD 5	39 49 50	075 09 09	01	211MGRR	77-09-16	1000	15.6	391	6.9	27
MOBIL OIL-GREENWICH 44	39 49 58	075 15 12	01	211MGRR	77-09-21	1100	15.0	634	4.1	54
MOBIL OIL-GREENWICH 45	39 50 05	075 15 23	01	211MGRR	76-11-05	0925	15.1	2120	4.5	132
MOBIL OIL-GREENWICH 40	39 50 12	075 15 20	01	211MGRR	76-11-05	0945	15.1	864	4.3	177
MOBIL OIL-GREENWICH 41	39 50 27	075 15 03	01	211MGRR	76-11-05	1000	15.7	726	5.3	111
				211MGRR	77-09-21	1130	16.0	815	4.8	110
MOBIL OIL-GREENWICH 47	39 50 36	075 15 01	01	211MGRR	76-11-05	1010	13.9	517	6.2	132
				211MGRR	77-09-21	1145	14.0	549	5.3	130
NATIONAL PARK BORO WD 2	39 51 56	075 10 53	01	211MGRR	77-09-21	1300	15.0	322	6.0	32

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER- BEARING ZONE (FT)	DEPTH TO BOT- TOM OF WATER- BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	INSTAN- TANEOUS FLOW RATE (GPM)
CLAYTON BORO WD 3	76-11-05	133.00	1010	800	740	802	746	800	10	700
	77-09-14	133.00	1010	800	740	802	746	800	10	700
CLAYTON BORO WD 4	76-11-05	140.00	943	740	657	778	670	740	10	1200
OWENS ILLINOIS 1	77-09-14	144.00	650	647	585	647	607	647	15	500
GLASSBORO BORO WD 3	77-09-14	150.00	--	615	544	--	562	612	10	700
PITMAN BORO WD P1	77-09-14	140.00	514	514	460	--	468	514	10	350
SO JERSEY WS CO 3	76-11-05	35.00	270	268	225	266	234	265	30	400
	77-09-14	35.00	270	268	225	266	234	265	30	280
SWEDESBORO BORO WD 2	77-09-16	30.00	439	244	190	258	217	240	10	350
WOODBURY CTY WD-SEWELL 1	77-09-16	20.00	317	314	247	315	271	312	60	1000
SEWELL WC 2	77-09-16	60.00	374	368	315	372	336	368	1440	500
MANTUA WC 3	77-09-16	10.00	335	268	--	--	230	265	1440	500
WENONAH BORO WD 2	77-09-16	30.00	314	310	260	310	270	310	10	550
PENNS GROVE WC-BRIDGPT 2	77-09-21	20.00	127	88	60	84	65	85	20	95
EI DUPONT REPAUNO 3	77-09-21	10.00	103	101	--	103	91	101	10	250
EI DUPONT REPAUNO 6	77-09-21	10.00	--	109	--	--	84	109	1440	350
WOODBURY WD RAILROAD 5	77-09-16	35.00	--	457	--	--	405	457	10	700
MOBIL OIL-GREENWICH 44	77-09-21	20.00	--	139	--	--	116	136	10	1000
MOBIL OIL-GREENWICH 45	76-11-05	3.00	--	118	--	--	95	118	1440	1000
MOBIL OIL-GREENWICH 40	76-11-05	20.00	267	228	180	233	195	225	1440	1000
MOBIL OIL-GREENWICH 41	76-11-05	20.00	280	266	224	271	230	259	1440	800
	77-09-21	20.00	280	266	224	271	230	259	10	800
MOBIL OIL-GREENWICH 47	76-11-05	20.00	247	245	217	242	220	240	1440	400
	77-09-21	20.00	247	245	217	242	220	240	15	400
NATIONAL PARK BORO WD 2	77-09-21	30.00	307	282	194	288	241	282	10	600

SALEM COUNTY

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TIME	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
SALEM NUCLEAR GEN STA 3	39 27 40	075 32 02	01	211MLRW	76-10-07	1115	15.3	452	7.0	30
SALEM NUCLEAR GEN STA 1	39 27 42	075 32 00	01	211MLRW	76-10-07	1055	15.3	474	6.7	36
SALEM NUCLEAR GEN STA 5	39 27 43	075 31 58	01	211MGRR	76-10-07	1105	19.6	376	7.3	18
SALEM NUCLEAR GEN STA 2	39 27 44	075 32 05	01	211MLRW	76-10-07	1125	15.4	715	7.0	114
L ALLOWAY CR ELEM SCH 1	39 27 51	075 24 41	01	211MLRW	77-09-27	1300	--	517	--	45
SALEM CITY WD-QUINTON ML	39 32 53	075 24 25	02	211MLRW	76-10-07	1400	14.6	434	7.0	14
				211MLRW	77-09-27	1000	14.9	443	8.0	17
SALEM CITY WD-KEASH CK 2	39 33 42	075 27 18	01	211MLRW	76-10-07	1320	14.1	513	6.8	54
				211MLRW	77-09-27	0925	--	331	7.9	26
NJ DEP-FT MOTT S P 1	39 36 20	075 33 10	01	211MGRR	76-10-06	1115	--	559	6.7	102
				211MGRR	77-09-22	1520	--	541	--	96
US ARMY-FINNS POINT	39 36 41	075 33 22	01	211MGRR	76-10-06	1145	16.0	684	6.8	140
				211MGRR	77-09-22	1430	--	640	--	130
PENNSVILLE TWP WD 4	39 37 54	075 31 48	01	211MGRR	76-10-05	1030	13.4	152	6.4	11
				211MGRR	77-09-22	1245	13.6	152	7.1	12
WOODSTOWN BORO WD 2	39 39 04	075 19 46	02	211MGRR	76-10-07	1450	17.1	1030	7.6	195
				211MGRR	77-09-27	1050	17.4	988	8.0	180
WOODSTOWN BORO WD 3	39 39 27	075 19 27	01	211MGRR	76-10-07	1510	17.3	999	7.6	182
				211MGRR	77-09-27	1110	18.2	996	8.0	190
RICHMAN ICE CREAM 1	39 39 28	075 21 47	01	211MGRR	76-10-07	1615	15.2	424	7.5	22
				211MGRR	77-09-27	1145	15.2	420	8.2	24
RICHMAN ICE CREAM 2	39 39 28	075 21 47	02	211MGRR	77-09-27	1135	--	536	--	50
PENNSVILLE TWP WD 3	39 39 54	075 30 13	01	211MGRR	76-10-05	1115	13.7	97	6.1	8.4
				211MGRR	77-09-22	1345	13.7	100	7.1	10
PENNSVILLE TWP WD 1	39 39 58	075 30 45	01	211MGRR	76-10-05	1300	14.1	439	6.7	65
				211MGRR	77-09-22	1325	14.2	433	7.5	67
PENNSVILLE TWP WD 2	39 40 09	075 30 43	01	211MGRR	76-10-05	1200	14.5	533	6.5	108
				211MGRR	77-09-22	1335	14.6	534	7.1	110
ATL CITY EL-DEEPWATER 3R	39 40 46	075 30 22	02	211MGRR	77-09-22	1115	13.6	383	7.5	49
ATL CITY EL-DEEPWATER 2	39 40 47	075 30 27	01	211MGRR	77-09-22	1130	14.0	458	7.2	76
ATL CITY EL-DEEPWATER 5	39 40 50	075 30 30	01	211MGRR	76-10-06	1345	14.8	406	6.4	62
				211MGRR	77-09-22	1100	14.8	368	7.1	54
ATL CITY EL-DEEPWATER 6	39 41 00	075 30 30	01	211MGRR	77-09-22	1050	15.6	534	7.2	110
EI DUPONT-DRINKWATER 8	39 41 12	075 30 28	01	211MGRR	76-10-06	1015	14.9	491	6.8	64
				211MGRR	77-09-22	0950	14.8	503	7.8	70
PENNS GROVE WC 28	39 42 47	075 27 14	01	211MGRR	76-10-06	0830	13.3	221	5.4	15
PENNS GROVE WC-LAYNE 1	39 42 56	075 27 18	01	211MGRR	76-10-06	0845	14.4	941	6.8	199
				211MGRR	77-09-22	0900	15.0	954	7.6	210

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SALEM COUNTY--Continued

LOCAL IDENT- I- FIFR	DATE OF SAMPLF	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	TOTAL DEPTH OF WELL (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	INSTAN-TANEOUS FLOW RATE (GPM)
SALEM NUCLFAR GEN STA 3	76-10-07	20.00	--	293	--	--	243	293	10	200
SALEM NUCLFAR GEN STA 1	76-10-07	20.00	--	298	--	--	248	298	60	310
SALEM NUCLFAR GEN STA 5	76-10-07	20.00	--	--	--	--	--	--	1440	800
SALEM NUCLFAR GEN STA 2	76-10-07	20.00	--	281	--	--	230	280	15	200
L ALLOWAY CR FLEM SCH 1	77-09-27	10.00	--	340	--	--	--	--	10	10
SALEM CITY WD-QUINTON ML	76-10-07	7.00	--	250	--	--	--	--	15	150
	77-09-27	7.00	--	250	--	--	--	--	10	150
SALEM CITY WD-KEASB CK 2	76-10-07	5.00	--	157	82	--	110	157	10	350
	77-09-27	5.00	--	157	82	--	110	157	5	400
NJ DEP-FT MOTT S P 1	76-10-06	8.00	--	320	300	--	300	320	5	140
	77-09-22	8.00	--	320	300	--	300	320	10	25
US ARMY-FINNS POINT	76-10-06	7.00	--	319	302	--	282	319	15	60
	77-09-22	7.00	--	319	302	--	282	319	20	60
PENNSVILLE TWP WD 4	76-10-05	10.00	--	137	--	--	117	137	1500	380
	77-09-22	10.00	--	137	--	--	117	137	1440	380
WOODSTOWN BORO WD 2	76-10-07	45.00	705	705	674	--	670	705	10	350
	77-09-27	45.00	705	705	674	--	670	705	10	350
WOODSTOWN BORO WD 3	76-10-07	60.00	--	700	--	--	--	--	5	750
	77-09-27	60.00	--	700	--	--	--	--	10	700
RICHMAN ICE CREAM 1	76-10-07	25.00	475	475	400	--	418	446	180	100
	77-09-27	25.00	475	475	400	--	418	446	10	100
RICHMAN ICE CREAM 2	77-09-27	20.00	--	446	--	--	418	446	720	170
PENNSVILLE TWP WD 3	76-10-05	7.00	--	102	84	--	87	102	720	700
	77-09-22	7.00	--	102	84	--	87	102	180	550
PENNSVILLE TWP WD 1	76-10-05	8.00	248	248	212	238	213	238	90	250
	77-09-22	8.00	248	248	212	238	213	238	1440	230
PENNSVILLE TWP WD 2	76-10-05	7.00	242	232	197	232	210	230	60	350
	77-09-22	7.00	242	232	197	232	210	230	15	150
ATL CITY EL-DEEPWATER 3R	77-09-22	10.00	285	236	--	243	165	235	10	500
ATL CITY EL-DEEPWATER 2	77-09-22	20.00	345	238	--	--	158	234	15	700
ATL CITY EL-DEEPWATER 5	76-10-06	15.00	300	224	147	249	149	219	1440	500
	77-09-22	15.00	300	224	147	249	149	219	10	500
ATL CITY EL-DEEPWATER 6	77-09-22	15.00	220	188	147	190	158	188	10	600
EI DUPONT-DRINKWATER 8	76-10-06	14.00	--	361	--	--	317	361	1200	400
	77-09-22	14.00	--	361	--	--	317	361	1440	400
PENNS GROVE WC 2B	76-10-06	19.00	--	60	--	--	45	60	10	350
PENNS GROVE WC-LAYNE 1	76-10-06	19.00	366	357	279	--	317	357	15	750
	77-09-22	19.00	366	357	279	--	317	357	1440	650

Reproduced from best available copy.

THE FOLLOWING LIST SHOWS THE AQUIFER CODES AND GEOLOGIC NAMES OF THE FORMATIONS IN WHICH THE WELLS ARE FINISHED. THE AQUIFER CODES ALSO APPEAR IN THE COLUMN "GEOLOGIC UNIT" IN THE PRECEDING TABLE:

112CPMY , CAPE MAY FORMATION UNDIFFERENTIATED
112ERNS , CAPE MAY FORMATION, ESTURINE SAND FACIES
112PLCC , PLEISTOCENE-COHANSEY SAND UNDIFFERENTIATED
121CNSY , COHANSEY SAND
121CKKD , COHANSEY SAND-KIRKWOOD FORMATION
122KRKDU, KIRKWOOD FORMATION, UPPER SAND
122KRKD , KIRKWOOD FORMATION
122KRKDL, KIRKWOOD FORMATION, LOWER SAND
124MQVC , MANASQUAN-VINCENTOWN FORMATION, UNDIFFERENTIATED
124PNPN , PINEY POINT FORMATION
125HRRS , HORNERSTOWN SAND
211MLRW , MOUNT LAUREL SAND-WENONAH FORMATION
211EGLS , ENGLISHTOWN FORMATION
211MGRR , MAGOTHY-RARITAN FORMATIONS
211ODBG , RARITAN FORMATION, OLD BRIDGE SAND MEMBER
211FRNG , RARITAN FORMATION, FARRINGTON SAND MEMBER
217PTMC , POTOMAC GROUP

EXPLANATION OF GROUND WATER COLUMN HEADINGS

TOTAL DEPTH OF WELL(FT):
MAXIMUM DEPTH BELOW LAND SURFACE DATUM AT WHICH THE WELL WAS ORIGINALLY FINISHED. THIS DEPTH MAY BE SLIGHTLY DEEPER THAN "DEPTH TO THE BOTTOM OF SAMPLE INTERVAL" BECAUSE MANY WELLS HAVE A "TAILPIECE" OR SHORT LENGTH OF CASING INSTALLED BELOW THE WELL SCREEN.

TOTAL DEPTH OF HOLE(FT. BELOW LSD):
TOTAL DEPTH TO WHICH THE HOLE WAS DRILLED, REGARDLESS OF THE FINISHED DEPTH OF THE WELL.

DEPTH TO THE TOP OF WATER BEARING ZONE(FT):
THE DEPTH LISTED IS THE BEST AVAILABLE INFORMATION WHICH INDICATES THE TOP OF THE WATER-BEARING ZONE THAT IS FURNISHING WATER TO THE WELL.

DEPTH TO BOTTOM OF WATER-BEARING ZONE(FT):
THE DEPTH LISTED IS THE BEST AVAILABLE INFORMATION WHICH INDICATES THE BOTTOM OF THE WATER-BEARING ZONE THAT IS FURNISHING WATER TO THE WELL. IF THE WELL DOES NOT FULLY PENETRATE THE WATER-BEARING ZONE THIS PARAMETER IS LEFT BLANK.

DEPTH TO THE TOP OF SAMPLE INTERVAL(FT):
IN A FULLY CASED WELL THIS VALUE IS THE UPPERMOST POINT AT WHICH WATER CAN ENTER THE WELL. IN BEDDED SEDIMENTS THIS IS USUALLY THE UPPERMOST PART OF THE SCREENED INTERVAL. IN SOME WELLS THE TOP OF THE WELL SCREEN IS INSTALLED INSIDE AND A FEW FEET ABOVE THE BOTTOM OF THE CASING. UNDER THESE CONDITIONS THE BOTTOM OF THE CASING IS CONSIDERED TO BE THE TOP OF THE SAMPLE INTERVAL.

DEPTH TO BOTTOM OF SAMPLE INTERVAL(FT):
IN A FULLY CASED WELL THIS VALUE IS THE LOWERMOST POINT AT WHICH WATER CAN ENTER THE WELL.

PUMP OR FLOW PERIOD PRIOR TO SAMPLING:
THIS PARAMETER IS INTENDED PRIMARILY FOR USE WITH THE PARAMETER "INSTANTANEOUS FLOW RATE", SO THAT THE EXACT VOLUME OF WATER PUMPED PRIOR TO SAMPLING CAN BE DETERMINED.

INSTANTANEOUS FLOW RATE:
FLOW RATE AT WHICH WATER IS REMOVED FROM THE WELL. INTENDED FOR USE WITH ABOVE PARAMETER SO THAT THE EXACT VOLUME OF WATER PUMPED PRIOR TO SAMPLING CAN BE DETERMINED.

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FACTORS FOR CONVERTING U.S. CUSTOMARY UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the U.S. customary units published herein to the International System of Units (SI). Subsequent reports will contain both the U.S. customary and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply U.S. customary units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons